# CITY COLLEGES OF CHICAGO ACADEMIC CATALOG 2014-2015

RICHARD J. DALEY

KENNEDY-KING



(кк)

MALCOLM X

HARRY S TRUMAN

(мх)

HAROLD WASHINGTON

WILBUR WRIGHT

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# OF CHICAGO

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WWW.CCC.EDU | 773-COLLEGE





## Dear City Colleges of Chicago Students,

I want to commend you for pursuing further education and let you know that the faculty and staff at City Colleges are dedicated to helping you reach your goal – whether it is to move on to a four-year college or immediately head into the workforce.

As a City Colleges graduate myself, I understand the kind of obstacles you may face along the way to earning your degree or certificate, but I also know that hard work at City Colleges pays off. Since we launched our Reinvention, we have worked to put in place resources that make it easier for you to succeed. Most recently, we introduced a new Student GPS system that creates clear pathways through the institution to your end goal.

This is the first time our catalog reflects the new system and is structured by a series of academic focus areas, incorporating specific semester-by-semester maps for each area. These are the same materials that you will discuss with your advisor as you create and track your progress along an education plan. Be sure to follow your plan to ensure that you maximize your time and money at City Colleges and graduate ready for your next step.

In a review of the catalog, you may also notice that some programs are new or revised. Through College to Careers, faculty and staff have worked closely with industry leaders and four-year colleges to ensure our programs prepare you with the relevant skills needed to succeed in the high-demand careers of today and tomorrow.

I hope you take full advantage of the academic programs, faculty expertise, and numerous student resources at City Colleges, and look forward to welcoming you to the proud group of City Colleges alumni at the end of your journey.

Sincerely,

Cheryl L. Hyman Chancellor

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# MISSION STATEMENT

Through our seven colleges, we deliver exceptional learning opportunities and educational services for diverse student populations in Chicago.

We enhance knowledge, understanding, skills, collaboration, community service and life-long learning by providing a broad range of quality, affordable courses, programs, and services to prepare students for success in a technologically advanced and increasingly interdependent global society.

We work to eliminate barriers to employment and to address and overcome inequality of access and graduation in higher education.

## Community College District No. 508 Cook County State of Illinois

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John Gasiorowski Inspector General

Eugene Munin General Counsel

# **COLLEGE INFORMATION**



## Campus Programs





























### **RICHARD J. DALEY COLLEGE**

7500 S. Pulaski Road, Chicago, IL 60652 College to Careers focus: Advanced Manufacturing

Arturo Velasquez Institute 2800 S. Western Avenue, Chicago, IL 60608

## **KENNEDY-KING COLLEGE**

6301 S. Halsted Street, Chicago, IL 60621 College to Careers focus: Culinary Arts and Hospitality Construction Technology and Drafting

Dawson Technical Institute 3901 S. State Street, Chicago, IL 60609

#### MALCOLM X COLLEGE

1900 W. Van Buren Street, Chicago, IL 60612 College to Careers focus: Healthcare

West Side Learning Center 4624 W. Madison Street, Chicago, IL 60644

#### **OLIVE-HARVEY COLLEGE**

10001 S. Woodlawn Avenue, Chicago, IL 60628 College to Careers focus: Transportation, Distribution, and Logistics

South Chicago Learning Center 3055 E. 92nd Street, Chicago, IL 60617

#### HARRY S TRUMAN COLLEGE

1145 W. Wilson Avenue, Chicago, IL 60640 College to Careers focus: Education, Human Sciences (Liberal Arts), and Natural Sciences

Lakeview Learning Center 3310 N. Clark Street, Chicago, IL 60657

## HAROLD WASHINGTON COLLEGE

30 E. Lake Street, Chicago, IL 60601 College to Careers focus: Business and Professional Services

#### WILBUR WRIGHT COLLEGE

4300 N. Narragansett Avenue, Chicago, IL 60634 College to Careers focus: Information Technology

Humboldt Park Vocational Education Center 1645 N. California Avenue, Chicago, IL 60647

# SERVICES

## **STUDENT SERVICES**

2014/2015 Academic Calendar

## City Colleges of Chicago – College Credit Academic Calendar 2014-2015

FALL 2014 TERM	REGULAR 16 WEEK SESSION	12 WEEK SESSION <sup>2</sup>	8 WEEK SESSION <sup>2</sup>
Online registration <sup>3,4</sup>	Apr 7, 2014 – Aug 25, 2014	Apr 7, 2014 – Sept 22, 2014	Apr 7, 2014 – Oct 20, 2014
On-campus registration <sup>3,4</sup>	Apr 21, 2014 – Aug 25, 2014	Apr 21, 2014 – Sept 22, 2014	Apr 21, 2014 – Oct 20, 2014
First day of class	Aug 25, 2014 (Mon)	Sept 22, 2014 (Mon)	Oct 20, 2014 (Mon)
Labor Day Holiday		Sept 1, 2014 (Mon)	
Mid-term	Oct 22, 2014 (Wed)	Nov 5, 2014 (Wed)	Nov 19, 2014 (Wed)
Last day for student-initiated withdrawals	Nov 17, 2014 (Mon)	Nov 24, 2014 (Mon)	Dec 1, 2014 (Mon)
Thanksgiving Holiday (Thursday and Friday)	Nov 27-28, 2014 (Thu-Fri)		
Last day of fall classes			

SPRING 2015 TERM	REGULAR 16 WEEK SESSION	12 WEEK SESSION <sup>2</sup>	8 WEEK SESSION <sup>2</sup>		
Priority registration <sup>3</sup>	Nov 3, 2014 – Nov 9, 2014	Nov 4, 2014 – Nov 9, 2014	Nov 4, 2014 – Nov 9, 2014		
General registration (all students) <sup>3,4</sup>	Nov 10, 2014 – Jan 12, 2015	Nov 10, 2014 – Feb 9, 2015	Nov 10, 2014 – Mar 9, 2015		
First day of class	Jan 12, 2015 (Mon)	Feb 9, 2015 (Mon)	Mar 9, 2015 (Mon)		
Martin Luther King Holiday		Jan 19, 2015(Mon)			
President's Day Holiday	Feb 16, 2015 (Mon)				
Complete financial aid application for next academic year <sup>5</sup>		NO LATER THAN Feb 27, 2015			
Mid-term	Mar 11, 2015 (Wed)	Mar 25, 2015 (Wed)	Apr 15, 2015 (Wed)		
Spring Break		Mar 30 – Apr 5, 2015 (Mon-Sun)			
Last day for student-initiated withdrawals	Apr 13, 2015 (Mon)	Apr 20, 2015 (Mon)	Apr 29, 2015 (Wed)		
Spring 2015 session ends		May 9, 2015			

SUMMER 2015 TERM	REGULAR SESSION
Priority registration <sup>3</sup>	Apr 6, 2015 – Apr 12, 2015
General registration (all students) <sup>3,4</sup>	Apr 13, 2015 – June 3, 2015
First day of class	Jun 3, 2015 (Wed)
Independence Day Holiday	Jul 3, 2015 (Thu)
Mid-term	Jul 1, 2015 (Wed)
Last day for student-initiated withdrawal	Jul 15, 2015 (Wed)
Summer 2015 session ends	Jul 25, 2015 (Sat)

#### NOTES:

- 1. <u>College Credit Academic Calendar</u> is subject to change. Please contact the college for details.
- 2. Sessions and Course Offerings: not all courses are offered each session, nor are all sessions offered at each college. Please contact the college for details.
- 3. <u>New Students:</u> all new students are strongly encouraged to complete the registration process as early as possible, preferably prior to end of Summer for fall entering students. The registration process for new students includes placement testing, college orientation, financial aid processing, career advising and academic program selection, and initial course selection. Please see your College Advisor to begin.
- 4. <u>Continuing Students</u>: continuing students are strongly encouraged to complete the registration process as early as possible to ensure the best course and schedule availability. Please see your College Advisor prior to registering to discuss your career and education goals, academic program, graduation requirements and your progress toward graduation, course selection, and, if applicable, transfer.
- 5. <u>Financial Aid:</u> students are strongly urged to apply for financial aid (<u>www.fafsa.gov</u>) as early as possible (preferably by March 1st) for the academic year beginning in the fall. Please contact the financial aid office for details.

The Student Services team at your college provides a broad range of services to support the achievement of students' academic, career, and life goals. They can also refer students to external support agencies when needed. More information may be found at <u>ccc.edu/studentservices</u>. Some of the many services offered by your Student Services team are listed below, and are subject to change.

## ACADEMIC SUPPORT SERVICES

## Academic Advising

City Colleges offers support for students from the first day of class through graduation. Each campus has full-time College Advisors on staff to help students chart an education plan toward success.

Advisors can assist students with setting goals, choosing which degree or professional certificate to pursue, creating an education plan, selecting the appropriate classes, connecting with essential support services, planning for transfer to a four year college, and finding extracurricular groups related to a chosen career field.

## Tutoring

Each college provides numerous opportunities for students to receive help with their academic work. The best place to start is by logging in to GradesFirst, where students can learn about tutoring available at all seven City Colleges. Students can even make appointments with tutors using the GradesFirst system.

Another way that students can learn about tutoring opportunities is by visiting your college's Tutoring Center, where peer and professional tutors are available to offer assistance in a wide range of subjects. Additionally, individual departments may host tutoring activities in their subject areas at the department level. Finally, City Colleges of Chicago is working with embedded tutors to provide additional support inside the classroom. Students can request the assistance of a tutor at any of the City Colleges with a valid CCC Student ID.

## **Tutoring Services**

Taking advantage of tutoring services is quick and easy.

- Check tutor availability or make an appointment using GradesFirst. Log into GradesFirst (<u>ccc.gradesfirst.com</u>). On your home page, you'll see your courses listed and a link to schedule a tutor appointment. You can find drop in tutoring services or make an appointment.
- Visit your local Tutoring Center. Meet the tutoring staff and make arrangements for tutoring services. Find information about your college's tutoring services at <u>ccc.edu/tutoring</u>.

## Meet with a College Advisor Today

Students can make an appointment with a College Advisor in two ways:

- Log into GradesFirst (<u>ccc.gradesfirst.com</u>) and click "Get Advising" to identify your College Advisor and schedule an appointment with him or her.
- Contact your college's advising office. Find contact information about your college's advising office at <u>ccc.edu/advising</u>.

## Ventra U-Pass

The Ventra U-Pass offers full-time students unlimited rides on any CTA bus or train during an academic term. Students must maintain full-time enrollment status in order to retain their Ventra U-Pass privileges. The Ventra U-Pass should be retained for the student's entire academic career to avoid costly replacement fees.

Visit <u>ccc.edu/services/Pages/Get-Your-U-Pass.aspx</u> for more information about the Ventra U-Pass.

## **Credit by Assessment or Prior Learning**

College credit may be granted for specialized courses, general education courses, or elective courses through assessment or for prior learning experiences. Grades will not be awarded and credit earned will not be included in Grade Point Average (GPA) calculations. Financial aid is not available for any credit awarded by examination or evaluation. The City Colleges of Chicago may grant credit for college-level knowledge and skills acquired outside the classroom in two ways:

## Credit by Examination (Assessment)

A student may earn college credit by successfully completing one or more of the following examinations:

- College-Level Examination Program (CLEP) General Examinations
- CLEP Foreign Language Examinations (French or Spanish)
- American Council on the Teaching of Foreign Languages (ACTFL) Foreign Language Examinations (Italian, Arabic, Polish, Chinese or Japanese)
- DANTES Examination

Testing fees apply. Financial aid and veteran benefits are not available for credit by assessment.

## Credit by Evaluation (Prior Learning)

A student may request evaluation of life experiences, on-the-job training or development courses, or courses taken at non-collegiate institutions for possible City College credits. A student may earn City Colleges of Chicago credit through one or more of the following evaluation processes: articulation agreements with other institutions, portfolio evaluation, Standardized Credit Final Exams (Adult Education bridge students), and/or Evaluation for Licensed/Practical Nursing Bridge Programs.

Evaluation fees apply. Financial aid and veteran benefits are not available for credit by evaluation. Visit <u>ccc.edu/departments/Pages/Transfer-Resources.</u> <u>aspx</u> for more information about Credit by Assessment or Prior Learning. See your College Advisor or refer to the City Colleges of Chicago Student Policy Manual (<u>ccc.edu/menu/Pages/Policies.aspx</u>).

## **Disability Access Centers**

The Disability Access Centers are committed to providing services and support to ensure that qualified students are able to access and participate in the opportunities available at CCC. Our goal is to support equality of opportunity and full participation in our services, programs, and activities through provision of reasonable accommodations to qualified individuals in accordance with the Americans with Disabilities Act (ADA) of 1990,

# STUDENT SERVICES

Section 504 of the Rehabilitation Act of 1973, and all pertinent federal, state, and local anti-discrimination laws. Students who believe they need disability-related accommodations are responsible for requesting such accommodations and are responsible for providing all appropriate documentation to verify eligibility to their college's Disability Access Center (DAC). DACs will provide reasonable accommodations for qualified students with disabilities as required by law. Visit <u>ccc.edu/DAC</u> for more information

## **Wellness Centers**

The Wellness Centers provide mental health and social services to support students' personal well-being and academic success. Staff offer support for personal challenges such as stress and time management, adjusting to being a college student, family issues, relationship conflict, veterans' re-entry, anxiety, and depression. Our range of services includes individual counseling, support groups, testing for learning disabilities, and presentations on a host of wellness topics. In addition, the Wellness Centers provide referrals to community-based resources for childcare, emergency shelters, low-cost medical care, legal assistance, and food pantries. Students also benefit from assistance in applying for needs-based programs such as LINK, TANF, and health insurance under the Affordable Care Act.

All services are free and confidential. To make an appointment, call or walk in to your college's Wellness Center. Visit <u>ccc.edu/wellnesscenter</u> for more information.

## **Child Development Lab Schools**

The Child Development Lab Schools provide high-quality care for children of diverse backgrounds (including, dual language learners and children with special needs) for its college students, faculty and the greater Chicago community. In addition, the Child Development Lab Schools, serve as Academic Lab Schools providing demonstration and training sites for clinical observation and practicum students in Child Development, Nursing and other programs of study. All Lab Schools are accredited or in the process of Accreditation by the National Association for the Education for Young Children (NAEYC).

Children are cared for in a nurturing learning environment by highly skilled and qualified staff who provide a developmentally appropriate program that promotes the child's cognitive language, social-emotional, and physical development. Daily activities foster exploration and learning in reading, math and science, encouraging children to become enthusiastic lifelong learners. Parents are viewed as a critical partner in their child's learning and are encouraged to be actively involved, just as the program works to be responsive to family needs.

We are pleased to inform you that the Child Development Lab Schools are part of the new Chicago: Ready To Learn! Preschool program, a partnership between the CPS Office of Early Childhood Education and the Department of Family Support Services (DFSS). We provide subsidized funding to those who qualify through programs such as the Illinois Child Care Assistance Program and Head Start. The Child Development Lab Schools at Malcolm X, Daley, Olive-Harvey, and Kennedy King College serve children 3-5 years of age; Truman serves children 2-5 years of age. The hours of operation vary by location; please contact the center directly for more information.

Daley College – (773) 838-7561 Kennedy-King College – (773) 602-5481 Malcolm X College – (312) 850-7490 Olive-Harvey College – (773) 291-6317 Truman College – (773) 907-4740

## Special Note:

Arturo Velasquez Institute (AVI) offers child care for children 3-12 years of age. The hours of operation vary; please contact the center directly for more information.

Arturo Velasquez Institute (AVI) - (773) 843-4555

## **Online Course Options**

Online courses provide flexibility and access to City Colleges of Chicago students. Although online courses are offered through Harold Washington College (HWC), students across the district can utilize them as well. Students should contact their College Advisor if they have any questions about enrolling in online classes.

Online classes are offered in a variety of disciplines including courses in business, computer science, economics, English, geography, geology, history, humanities, mathematics, philosophy, political science, psychology, science, and sociology.

Online courses have the same prerequisites, academic requirements, credits, and transferability as courses taught in the traditional classroom format. They also have the same rigor and although faculty facilitate learning, students must have excellent time management skills to complete all of the online readings, assignments, and projects. HWC online courses are not self-paced, and students will move through the courses based on a clear syllabus and courses outline.

HWC offers web-based courses with some courses that have a televised video-component. . Students log into a learning managements system (Blackboard) and utilize a tool called Blackboard Collaborate to interact with their instructors and other students, read required course materials, submit homework assignments, view recorded course sessions, and take quizzes and exams. Some courses do have an in-person, required on-site component within the learning objectives. Online courses also require students to take exams in a proctored setting at one of the City Colleges or an off-site location. Finally, some portions of online courses are recorded on the CCC television channel, WYCC WISE, Channel 20.

Students can register for online courses at any of the seven City Colleges of Chicago. Upon registration, students are directed to the Website for online courses for further instructions. Students also are encouraged to take an online assessment of their readiness for online learning, as well as attend an online student orientation. Students also must have internet access. For more information about online learning courses offered at Harold Washington College, please contact the online support staff at (312) 553-5975 or visit the website at <u>ccc.edu/HWConline</u>.

## **FINANCIAL AID**

City Colleges of Chicago participates in numerous federal and state financial aid programs, including: Federal Pell Grant; Federal Supplemental Educational Opportunity Grant; Federal Work Study; Federal Direct Student Loans; Federal Parent Loans for Undergraduate Students; and the Monetary Award Program (MAP) Grant.

The first step in applying for all financial aid programs is to complete the FAFSA application at www.fafsa.gov, and to include the City Colleges' school code for the college that the student is planning to attend. Additional information on the eligibility criteria for financial aid and other program requirements are located in the Student Policy Manual (ccc.edu/menu/Pages/Policies.aspx) and also be can obtained Financial visitina the college's Aid Office by (ccc.edu/departments/Pages/Financial-Aid.aspx).

## ACADEMIC POLICIES

## Grade Designations

Grades issued to degree seeking students are recorded on a student's permanent academic record and transcript, are used to calculate a student's Grade Point Average (GPA), serve as the basis for a student's academic standing, and may apply towards graduation.

All academic transactions are recorded in a student's permanent academic record. All credit courses and letter grades earned, plus ADW courses and WTH courses (if the WTH occurred after the Statistical Date), appear on a student's transcript.

Grades awarded are:

- A = excellent
- B = good
- C = average
- D = minimum passing
- F = failure

For Foundational Studies and Continuing Education coursework, the grades awarded are:

- S = satisfactory
- F = failure

For Adult Education coursework, the grades awarded are:

 $\mathsf{P}=\mathsf{completed}$  all course and level requirements and can take next course at next level

 $\mathsf{R}=\mathsf{completed}$  all course requirements, however more work is need at this level

 $\mathsf{F}=\mathsf{failed}$  to meet the requirements of the course.

## **Graduation Requirements**

### **Graduation Requirements for Degrees**

To be eligible to graduate from any credit degree program, students must earn a grade of "C" or better in all courses used to satisfy core curriculum and/or general education requirements and hold a minimum GRAD-GPA of 2.0 or higher. Elective courses with a "D" final grade may count towards graduation. The City Colleges of Chicago reserves the right to award a student the degree he or she is seeking if all requirements for that degree have been met, even if the student has not applied for graduation.

## **Certificate Completion Requirements**

To be eligible for a Certificate of Completion in any credit certificate program, students must successfully complete all certificate specific courses which constitute a Basic Certificate or an Advanced Certificate with a grade of "C" or better in certificate specific courses. The City Colleges of Chicago reserves the right to auto-award certificates when a student completes all certificate requirements, even if the student has not applied for graduation.

## **Graduation College**

Students enrolled in a <u>selective</u> enrollment program will graduate from the college that offers the program and where the student is enrolled.

Students enrolled in <u>all other</u> programs will graduate from the college that offers the academic program where the majority (or greatest number if no majority) of the student's Graduation Credit Hours (excludes remedial hours) were earned. In case of a tie between two or more colleges (equal number of Graduation Credit hours earned from each college and each college offers the academic program), then the student may select his/her Graduation College.

## Human Diversity Requirement (HD)

Effective Fall 2012, newly enrolled students, or returning students who have not been enrolled for six consecutive semesters, seeking any Associate Degree at the City Colleges of Chicago are required to take at least one general education course that fulfills the State of Illinois Human Diversity (HD) requirement for an Associate Degree; no additional credits are to be added to the student's degree completion requirements. Students may select either a course that is approved by the Illinois Articulation Initiative (IAI) or a general education Human Diversity course that has not been IAI approved but has been approved by City Colleges of Chicago. Students may take World Language courses (104 and higher) to fulfill the HD requirement.

Students should meet with a College Advisor to select an approved general education HD course in order to fulfill the requirement. At this time the following degrees are exempt from this requirement:

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## Academic Residency Requirement

Although there is no limitation on the number of transfer credit hours which may be evaluated and posted to a student's academic record (see Transfer Credit on page 17 of the Student Policy Manual), all degree-seeking students must complete a minimum of fifteen (15) credit hours earned in City Colleges' classes. Visit <u>ccc.edu/menu/Pages/Policies.aspx</u> for more information on residency requirements.

## **International Students**

Visit ccc.edu/internationalstudents for more information.

## **PLACEMENT EXAMINATIONS**

CCC utilizes the computerized COMPASS exams (reading, writing, math and e-Write), paper and pencil ASSET, and ACT scores for appropriate placement into courses to support students' academic success. All students new to CCC are required to take the complete battery of placement exams, unless they show proof of having successfully completed appropriate college level courses, or opt to use ACT scores that are less than two years old. Visit <u>ccc.edu/placement</u> for more information.

## **STUDENT ACTIVITIES**

## Student Activities and Student Government (SGA)

The SGA and student clubs and activities play a vitally important and essential role in the life of students and CCC as an institution. The SGA and student clubs and activities foster student engagement, provide a key mechanism for communication between students and CCC administration, promote leadership development, and support the social, intellectual, recreational, and professional interests of students. Students are encouraged to participate.

Visit <u>ccc.edu/sga</u> for more information.

## **TEXTBOOK RENTAL**

CCC has partnered with Akademos/TextbookX to provide low-cost options for the purchase and rental of textbooks. Students are able to use their financial aid book vouchers as the down payment required for book rentals. A credit card is required to participate in the book rental program. Visit <u>ccc.edu/departments/Pages/Bookstores.aspx</u> for additional information on CCC's online bookstore.

## **VETERANS SERVICES**

The role of Veteran Services at CCC is to provide our returning service members with a holistic support system that encourages success in the classroom, while additionally attending to other unique needs of student veterans. Every college comes equipped with its own Veteran Resource Center, staffed with a full-time professional that is highly trained and knowledgeable of VA educational benefits. At City Colleges, our dedicated staff and faculty aim to ensure our returning service members receive the support they need in order to maximize their college experience. Visit ccc.edu/departments/Pages/Veterans-Services.aspx for more info.

The Veteran Certifying Official, located in the Financial Aid Office, is available to assist veterans and their dependents with utilizing the numerous state and federal veteran educational benefit programs in which the City Colleges participates. The Veteran Services specialist, located in the Student Services Office, can assist the veteran with issues related to his or her education, and can connect the veteran to external agencies such as healthcare providers, counseling services, housing assistance, and credit for prior learning.

Veterans and their dependents who plan to use their federal and/or state veteran educational benefits must meet with the Veteran Certifying Official prior to registering for courses for the first time. Additional information on both services and the required registration steps for veterans is available in the Student Policy Manual (ccc.edu/menu/Pages/Policies.aspx).

## RESIDENCY

For the purpose of determining tuition and fees charges, a student must provide documentation of his or her permanent address. A student must reside within the City of Chicago for at least 30 days immediately prior to the start of classes for the term to qualify for in-district tuition. All new students are required to provide one of the following documents to establish residency:

- Driver's license
- Voter registration card
- Copy of lease or mortgage statement
- Utility bill
- State of Illinois identification card
- Mexican consular ID card
- Current orders or a letter from command for military service persons
- Or a signed letter on letterhead from a homeless shelter confirming residency in the shelter

Students are responsible for ensuring that their official address on file at the City Colleges of Chicago is current and correct. Additional info on establishing residency is available in the Student Policy Manual (<u>ccc.edu/menu/Pages/Policies.aspx</u>).

## **FEES AND CHARGES**

- 1. Miscellaneous fees: Fees that are assessed to students are determined by each college.
- 2. Required fees: The following fees associated with course registration are required. They include, but are not limited to:
  - Registration fees
  - Activity fees
  - Partial payment fees
  - Online course licensing fees
  - Lab fees



- Non-refundable fees: The following fees associated with course registration are non-refundable. They include, but are not limited to:
  - Registration fees
  - Partial payment fees
  - Activity fees (activity fees may be refunded if courses are dropped before the term begins)

## **Financial Obligation**

Students are encouraged to make payment arrangements at the time of registration, and should consult with the Business Office for payment deadlines. Payment deadlines can vary according to when a student is registering for an upcoming term. Failure to make payment arrangements may result in a student being dropped from his/her courses. If a student fails to make payment but is not automatically dropped from course enrollment, the student is still responsible for paying any outstanding tuition and fees because he or she is responsible for taking appropriate steps to withdraw from a course. Acceptable forms of payment include: cash, check, credit/ debit cards, enrollment in the City Colleges of Chicago's online payment plan, or a Financial Aid Deferment. Enrollment in CCC's payment plan requires a credit card, checking account, or debit card. Third party payment options and scholarships are also accepted. Any student who fails to pay their balance in full will be prohibited from registering for upcoming terms or ordering transcripts until the debt is satisfied.

## **Transcript Charges**

Students may order official transcripts online. Visit <u>ccc.edu/transcripts</u> for more information and associated charges.

## **Other Charges**

- \$100.00 non-refundable charge for I-20 application processing for regular college-level enrollments
- \$40.00 per check returned for insufficient funds
- \$5.00 for student I.D. card replacement

## **Tuition and Fee Charges**

Tuition and fees are subject to change. Please refer to <u>ccc.edu/tuition</u> for current tuition and fee information.

## **Tuition Chargeback**

Chicago residents who wish to enroll in a degree program not available at CCC may apply for tuition assistance to attend another public community college in Illinois where the desired certificate or degree program is offered. Visit <u>ccc.edu/chargeback</u> for more information and to apply. Applications must be received by CCC at least 30 days prior to the beginning date of the semester or term of enrollment at the college the student plans to attend.

Non-Chicago residents who plan to enroll in a college program at CCC which is not available at a community college in their district, should apply for tuition assistance at their local community college. If no community college exists in their district, residents should go to their high school district to apply.

## **Tuition Waivers**

Senior citizens (age 65 or older) who meet certain income requirements may be eligible to register for credit classes tuition-free. Additional information on the senior waiver program is available in the Student Policy Manual or by inquiring with the Business Office.

## **Public Aid Recipients**

Public Aid recipients [categories beginning with (0)] may apply for tuition waivers only after they apply for Financial Aid and have been determined as Financial Aid ineligible. Public Aid recipients may be eligible for a tuition waiver of up to six credit hours. All hours above six will be paid by the enrolled public aid recipient at the regular tuition rate per semester/term.

## WITHDRAWALS AND REFUNDS

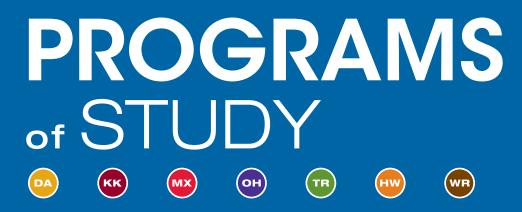
## **Refund and Withdrawal Policies**

When a student registers for classes at the City Colleges of Chicago, he or she accepts the responsibility of payment for those classes. However, in some circumstances a student may qualify for a refund of certain costs if he or she withdraws during the published refund period for a class. It is the student's responsibility to properly withdraw from a class if he or she no longer wishes to attend. The decision to withdraw from a class may impact a student's financial aid or veteran benefits, so it is essential that a student discuss the decision to withdraw with the appropriate parties prior to withdrawal.

Students should refer to their study lists for class-specific dates to withdraw and qualify for a tuition refund. Please note that certain fees are non-refundable. Non-refundable fees include: registration fees, payment plan fees, activity fees (activity fees may be refunded if courses are dropped before the term begins), online course licensing fees, insufficient funds fees, book charges, and any dollar amount that was given to the student in the form of a refund or advance. Additional information on refund and withdrawal policies is available in the Student Policy Manual (ccc.edu/menu/Pages/Policies.aspx).

## CAREER PLANNING AND PLACEMENT

City Colleges is committed to helping students at all stages of career development. Career Planning and Placement staff are available to assist students and alumni with career exploration, professionalism skills, and searching for employment. Career Planning and Placement also offers online tools including the Focus-2 Career Assessment and the Career Network online job board. Visit <u>ccc.edu/careerservices</u> for office locations and resources.



## **Degree Requirements**

KEY 💿 Daley 📧 Kennedy-Ki	ng 💿 Malcolm X	Olive-Harvey (	🕫 Truman 👜 Harold Wa	ashington 🚾 Wright		
MINIMUM GENERAL EDUCATION HOURS						
Associate in Associate in Associate in General Associate in Ap Arts Science Studies Science						
Communications	9	9	3	3		
Humanities/Fine Arts	9	9	5-6	3		
Mathematics	3	3	3-4	3		
Physical/Life Science	7	7	3-4	3		
Social Science	9	9	5-6	3		
Subtotal	37	37	20	15		
Minimum Program Core and Electives	25	27	40	45		
Total Required for Degree Completion	62	64	60	60		
Human Diversity Required	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
College(s) Offered At		<u></u>				

MINIMUM GENERAL EDUCATION HOURS

	Associate in Fine Arts/ Music Education	Associate in Fine Arts/Music Performance	Associate in Fine Arts/ Studio	Associate in Engineering Science
Communications	9	9	6	6
Humanities/Fine Arts	6	6	6	3
Mathematics	4	4	4	5
Physical/Life Science	7	7	7	5
Social Science	9	3	6	3
Subtotal	35	29	29	22
Minimum Program Core and Electives	28	39	42	42
Total Required for Degree Completion	63	68	65	64
Human Diversity Required	✓	$\checkmark$	✓	✓
College(s) Offered At	<b>(</b>	<b></b>	<b>(11)</b>	

#### **Human Diversity**

The Illinois Community College Board and the State of Illinois requires the inclusion of instruction and coursework in human diversity for all degree programs. Specifically, instruction and course-work in human diversity includes a review of issues related to race, ethnicity, gender, disability, sexual orientation, age, and familial status. Many of the human diversity courses fulfill the General Education requirements of the City Colleges of Chicago's degree programs and some fulfill required program electives. Human Diversity courses at the City Colleges of Chicago also are designed to satisfy transfer requirements. All Associate degrees must be inclusive of a transfer course that satisfies the State of Illinois' Human Diversity requirement. (refer to page 9 for degree programs that are exempt from this requirement).

#### **Certificate Programs**

College credit Career Certificate Programs are awarded for satisfactory completion of a series of structured credit courses (50 semester credit hours or less). Career Certificate Programs comprise prescribed curriculum intended to prepare an individual for employment in a specific field. City Colleges of Chicago awards Basic and Advanced Career Program certificates. · Basic Certificates are less than 30 credit hours.

Advanced Certificates range from 30 to 50 credit hours.

**Note:** The AA, AES, AFA, and AS degrees are generic, allowing students to customize their electives in a variety of concentrations to meet their career and academic goals. An Associate in Applied Science Degree is an award for the satisfactory completion of a prescribed Career Program's curriculum intended to prepare students for employment in a specific field. Traditionally, it is not designed for transfer. However, some four-year colleges and universities may accept course work pursued for an AAS degree towards their degree completion requirement. Degree configurations vary and may require more than the minimum required for completion. General education spans communications, humanities/fine arts, social and behavioral sciences, and physical and life sciences.

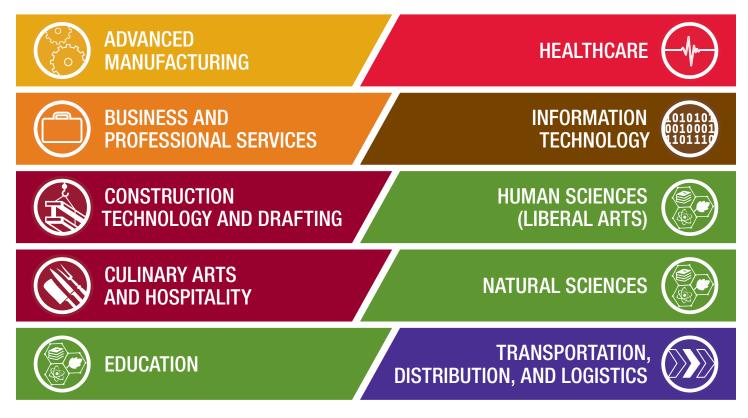
#### **Credit Academic Programs/Plans**

Students must maintain a minimum Cumulative Grade Point Average (CUM-GPA) of 2.0 to remain in good academic standing. For more information, review the Student Policy Manual at <u>ccc.edu/menu/Pages/Policies.aspx</u>.

# KNOW WHAT YOU WANT What are your career and life goals?

A degree or certificate from CCC is your ticket to a rewarding career, either right after graduation, or after a successful transfer to a fouryear university. We have the resources to get you there, but you have to make some choices about your path.

The City Colleges of Chicago offers over 200 degree and certificate programs. That's a lot of choices! To narrow down your options, **1) choose one of our ten Focus Areas.** Your College Advisor can give you tools and ask you the right questions to help you make your decision. Once you have chosen a focus area, you should consult with your College Advisor to **2) decide if you plan to transfer** to a four-year school. With this information, you and your advisor can determine the degree or certificate program that works best for you!



Consider that in 2018, 80% of jobs in Illinois will fall under College to Careers focus areas. The College to Careers (C2C) initiative makes sure that we are training people to fill these positions. C2C also partners with potential employers and transfer institutions to ensure students make smooth transitions to meet their goals.

## Set an appointment with your College Advisor!

Your College Advisor is your biggest ally in choosing your path at City Colleges. It is important that you meet with them frequently. Use the program **GradesFirst** to set an appointment.

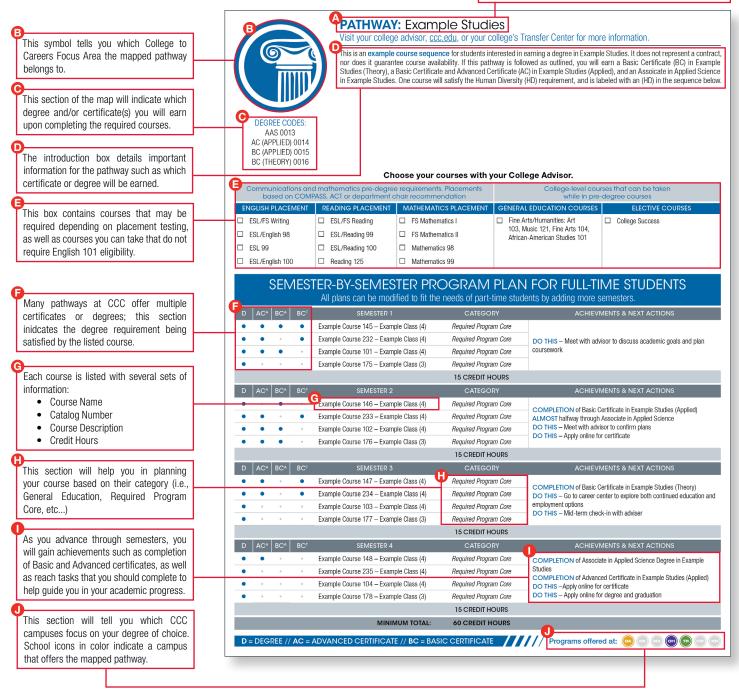
- 1. Go to <u>ccc.gradesfirst.com</u> and log in with your CCC username and password.
- 2. Click on the Calendar tab, and then on "Get Advising" on the right side of the page.
- 3. Your advisor's calendar will pop up; choose an appointment date and time.

# A HOW-TO GUIDE

## On reading the degree and certificate student GPS maps

Below is a sample GPS map representative of those found within the Academic Catalog. Each map will serve as a template to help plan your education at the City Colleges of Chicago. Please note, these maps are only templates, not individualized plans, and you should meet with your advisor to discuss how to customize the map for your personal educations goals.

When you meet with your advisor, you will choose your Focus Area. Each Focus Area helps to place you in courses that are relevant to your field of study and intended degree.



## PROGRAMS OF STUDY Advanced Manufacturing

Focus Area: Advanceo Manufacturing

# ADVANCED MANUFACTURING

## COLLEGE TO CAREERS LOCATION: RICHARD J. DALEY COLLEGE

**Furniture, appliances, electronics,** even the planes and trucks that move these items from place to place, everything must be manufactured somewhere. Much of this work is done by machines, which must be calibrated, programmed, operated, and maintained by skilled technicians. Some of the work must be done by hand, such as welding components together, or checking components for quality control. If you are interested in mechanics and engineering in a hands-on environment, and transforming raw materials into useful products, you should consider the field of Advanced Manufacturing.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

	D	AC	BC
Basic Manufacturing (pg. 197)	0	0	•
CNC Machining (pg. 17)	0	•	•
CNC Technician (pg. 197)	0	٠	•
Factory Automation (pg. 19)	0	•	•
Industrial Maintenance (pg. 197)	0	•	0
Manufacturing Technology (pg. 17, 19, 21)	•	0	0
Quality Assurance (pg. 17, 19, 21)	0	۰	•
Welding (pg. 21)	0	٥	•

Students in Advanced Manufacturing may take classes like the following:

English 101	Composition I May require taking English readiness courses	
Mathematics 125	Introduction to Statistics May require taking mathematics readiness courses	
Manufacturing Technology 139	Print Requirements and Quality Assurance	
Manufacturing Technology 292	Principles of Mechanisms	
Manufacturing Technology 111-1	Machining Processes I	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE

PROGRAMS OF STUDY Advanced Manufacturing

DEGREE CODES AAS 0770 AC (CNC) 0725 BC (QA) 0729 BC (CNC) 0724

## PATHWAY: Manufacturing Technology: CNC Machining Emphasis

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Manufacturing Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Quality Assurance (QA), a Basic Certificate and an Advanced Certificate (AC) in Computerized Numerical Control (CNC) Machining, and an Associate in Applied Science (AAS) in Manufacturing Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Manufacturing Technology offers the technologies required for maintenance mechanics in the manufacturing or service industries and covers theory and practical projects. The program is appropriate for career changers, high school graduates, general education diploma holders, and machining workers with a need to enhance their careers.

The Advanced Certificate program in Computerized Numerical Control is designed for the study of the basic principles of machine tool technology incorporating basic computer applications to the manufacturing industry, including CNC programming and computer integrated manufacturing (CAD/CAM).

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT READING PLACEMENT MATHEMATICS PLACEMENT		GENERAL EDUCATION COURSES	ELECTIVE COURSES		
□ ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	Fine Arts/Humanities: Art	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	103, Music 121, Fine Arts 104, African-American Studies 101		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	□ Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC <sup>CNC</sup>	BCQA	BCCNC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	0	•	Manufacturing Technology 111-1 – Machining Processes I (3)	Required Program Core	
•	•	0	•	Manufacturing Technology 112-1 - Machining Processes II (3)	Required Program Core	
•	•	•	۰	Manufacturing Technology 139 – Print Requirements and Quality Assurance (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goa and plan coursework
•	0	0	۰	Manufacturing Technology 141–Manufacturing Materials and Processes (3)	Required Program Core	
•	0	0	۰	Art 103 – Art Appreciation (3)	Humanities/Fine Arts	
					15 CREDIT HOURS	
D	AC <sup>CNC</sup>	BCQA	BCCNC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	0	۰	Manufacturing Technology 138 – Introduction to SolidWorks (3)	Required Program Core	
•	•	0	•	Manufacturing Technology 140 – CNC Fundamentals (3)	Required Program Core	
•	0	•	۰	Manufacturing Technology 142 – Geometric Dimensioning and Tolerancing (3)	Required Program Core	ALMOST halfway through Associate in Applied Science degree DO THIS – Meet with advisor to confirm plans
•	•	•	٠	Manufacturing Technology 143 – Advanced Metrology (3)	Required Program Core	
•	•	•	•	Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	
					16 CREDIT HOURS	

Advanced Manufacturing

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				(continuou non	. 6.	oriodo pago,		
D	ACCNC	BCQA	BCCNC	SEMESTER 3	,	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	•	Manufacturing Technology 123 – CNC Milling Operations and Programming (3)		Required Program Core*		
•	•	0	•	Manufacturing Technology 137 – CNC Turning Operations and Programming (3)		Required Program Core*	COMPLETION of Basic Certificate in CNC Machining COMPLETION of Basic Certificate in Quality Assurance	
0	•	0	۰	Manufacturing Technology 144 – Wire Electrical Discharge Machining (3)		Required Program Core	DO THIS – Go to Career Center to explore both continued education and employment options DO THIS – Mid-term check-in with advisor	
0	•	0	۰	Manufacturing Technology 207 - Introduction to MasterCAM (3	3)	Required Program Core		
•	۰	•	•	Manufacturing Technology 104 – Statistical Process Control (3)	)	Required Program Core		
						15 CREDIT HOURS		
D	ACCNC	BCQA	BCCNC	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	•	٠	Manufacturing Technology 191 – Industrial Electricity (4)		Required Program Core	COMPLETION of Associate in Applied Science degree	
•	٠	•	٠	Manufacturing Technology 292 – Principles of Mechanisms (3)		Required Program Core	in Manufacturing Technology COMPLETION of Advanced Certificate in CNC	
•	•	•	٠	English 101 – Composition I (3)		Communications	Machining DO THIS – Apply online for advanced certificate	
•	٠	•	٠	Sociology of Sex and Gender (3)		Social/Behavioral Sciences	DO THIS – Apply online for degree and graduation	
•	٠	•	0	History of Latin America (3) General Education (HD)		*Manufacturing Technology 112, 123, 137 are Requiri Program Core for the AC(CNC) and BC(CNC) but are Program Electives for the AAS		
						16 CREDIT HOURS		
				ΜΙΝΙΜUΜ ΤΟΤΑ	L:	62 CREDIT HOURS		
				PROGRAM EL	ECT	IVES (AAS)		
	Manuf	acturing	g Techno	logy TC1 151 – Introduction to Welding (3)		Manufacturing Technology	TC1 145 – Computer Integrated Manufacturing (CIM) (3)	
	Manuf	acturing	g Techno	logy TC1 112 – Machining Process II (3)		Manufacturing Technology	TC1 144 – Wire Electrical Discharge Machining (3)	
	Manuf	acturing	g Techno	logy TC1 123 – CNC Milling Operations and Programming (3)		Manufacturing Technology	TC1 146 – Team Dynamics in Manufacturing (3)	
	Manuf	acturing	g Techno	logy TC1 137 – CNC Turning Operations and Programming (3)		Logistics/Transportation/Distribution 152 – Introduction to Business Logistics (3)		
	Manuf	acturing	g Techno	logy TC1 201 – Supervised Work-based Learning (3)		Computer Information Syste	ems 120 – Introduction to Microcomputers (3)	
	Manuf	acturing	g Techno	ology TC1 253 – Pneumatics (3)		Engineering 111 – Introduc	tion to the Engineering Profession (2)	
	Manuf	acturing	g Techno	logy TC1 255 – Industrial Hydraulics (3)		Engineering 131 – Enginee	ring Graphics and Introduction to Design (3)	
	Manuf	acturing	g Techno	logy TC1 291 – Programmable Logic Controllers (3)		Engineering 132 – Descript	ive Geometry (3)	
	Manuf	acturing	g Techno	logy TC1 295 – Electrical Motor Controls (3)		Physics 131 – Mechanics a	nd Power (3)	
	Manuf	acturing	g Techno	logy TC1 297 – Advanced Mechanical Systems (3)				



**Advanced Manufacturing** 



AAS 0770 AC (FA) 0727 BC (QA) 0729 BC (FA) 0726

## **PATHWAY:** Manufacturing Technology: Factory Automation Emphasis

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a degree in Manufacturing Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Quality Assurance (QA), a Basic Certificate and an Advanced Certificate (AC) in Factory Automation (FA), and an Associate in Applied Science (AAS) in Manufacturing Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. This does not represent a contract, nor does it guarantee course availability.

The AAS degree program in Manufacturing Technology offers the technologies required for maintenance mechanics in the manufacturing or service industries and covers theory and practical projects. The program is appropriate for career changers, high school graduates, general education diploma holders, and machining workers with a need to enhance their careers.

Factory Automation technicians operate, maintain, repair, and install automated production equipment used through manufacturing. In addition to the traditional mechanical and electrical skills, modern production requires digital, programmable skills such as robotic programming, sensor technology, and the use of Programmable Logic Controllers.

This certificate provides foundational mechanical and electrical skills for entry level jobs in maintenance, repair and installation of manufacturing production equipment. Program completers will be employable as a maintenance mechanic trainee or helper, and as a building maintenance trainee. Students will also have the opportunity to earn the Manufacturing Skill Standards Council's (MSSC) credential in Maintenance Awareness.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department of	e requirements. Placements chair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: Art	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	103, Music 121, Fine Arts 104, African-American Studies 101		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
□ ESL/English 100	□ Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D ACF4	BC <sup>Q/</sup>	BCFA	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	۰	٠	Manufacturing Technology 111-1 – Machining Processes I (3)	Required Program Core		
• •	0	0	Manufacturing Technology 139 – Print Requirements and Quality Assurance (3)	Required Program Core		
• •	0	0	Manufacturing Technology 141 – Manufacturing Materials and Processes (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goa and plan coursework	
• •	۰	•	Manufacturing Technology 253 – Pneumatics (3)	Required Program Core		
• •	٠	•	Manufacturing Technology 255 – Industrial Hydraulics (3)	Required Program Core		
				15 CREDIT HOURS		
D ACF	A BC <sup>Q/</sup>	BCFA	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	•	•	Manufacturing Technology 138 – Introduction to SolidWorks (3)	Required Program Core		
• •	٠	٠	Manufacturing Technology 140 – CNC Fundamentals (3)	Required Program Core		
••	•	٠	Manufacturing Technology 142 – Geometric Dimensioning and Tolerancing (3)	Required Program Core	ALMOST halfway through Associate in Applied Science DO THIS – Meet with advisor to confirm plans	
• •	0	•	Manufacturing Technology 191 – Industrial Electricity (4)	Required Program Core	-	
• •	•	۰	Mathematics 125 – Introductory Statistics (4)	Required Program Core		
				17 CREDIT HOURS		

Advanced Manufacturing

## (continued from previous page)

D ACFA	A BCQA	BCFA	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•			Manufacturing Technology 104 – Statistical Process Control (3)		Required Program Core			
•	•	•	Manufacturing Technology 104 – Otdatated Process Control (c) Manufacturing Technology 143 – Advanced Metrology (3)		Required Program Core	COMPLETION of Basic Certificate in Manufacturing		
	0	•	Manufacturing Technology 292 – Principles of Mechanisms (3)	292 – Principles of Mechanisms (3) Required Program Core Continued education and employment ontions				
	•	-	Manufacturing Technology 295 – Electrical Motor Controls (3)					
		-	Manufacturing Technology 291 – Programmable Logic Controls (3)		Required Program Core	DO THIS – Mid-term check-in with advisor		
		-			15 CREDIT HOURS			
	A BC <sup>QA</sup>	BCFA	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	•	•	Manufacturing Technology 146 – Team Dynamics in Manufacturing ( <b>OR</b> Physics 131 – Mechanics and Power (3)	(3)	Required Program Core			
0	0	•	Art 103 – Art Appreciation (3)		Humanities/Fine Arts	COMPLETION of Basic Certificate in Quality Assuran COMPLETION of Associate in Applied Science in		
•	•	•	English 101 – Composition I (3)		Required Program Core	Manufacturing Technology		
0	0	•	History 247 – History of Latin America (3)		General Education (HD)	DO THIS – Apply online for advanced certificate DO THIS – Apply online for degree and graduation		
0	0	•	Sociology 207 – Sociology of Sex and Gender (3)		Social/Behavioral Sciences			
					15 CREDIT HOURS			
ACFA	A BC® <sup>⊿</sup>	BCFA	SEMESTER 5		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	۰	•	Manufacturing Technology 297 – Advanced Mechanical Systems (3)		Required Program Core	COMPLETION of Advanced Certificate in		
•	Manufacturing Technology 145 – Computer Integrated Machining (CIM) (3)		5 53 I 5		Required Program Core	Manufacturing Technology: Factory Automation *Manufacturing Technology 295, 253 and 291 are Required Program Core for the AC(FA) and BC(FA) but are program electives for the AAS **Manufacturing Technology 145 is Required Program Core for the AC(FA) but is a program elective for the A		
					6 CREDIT HOURS			
			MINIMUM TOTA	L:	6 CREDIT HOURS			
	i		MINIMUM TOTA MINIMUM TOTAL FOR DEGRE					
				:E:	68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS			
] Man	nufactur	ing Tec	MINIMUM TOTAL FOR DEGRE	:E:	68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS)	TC1 145 – Computer Integrated Manufacturing (CIM) (3)		
			MINIMUM TOTAL FOR DEGRE		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology	TC1 145 – Computer Integrated Manufacturing (CIM) (3) TC1 144 – Wire Electrical Discharge Machining (3)		
] Man	nufactur	ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology			
] Man ] Man	nufactur nufactur	ring Tec ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3) hnology TC1 112 – Machining Process II (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology	TC1 144 – Wire Electrical Discharge Machining (3)		
] Man ] Man ] Man	nufactur nufactur nufactur	ring Tec ring Tec ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3) hnology TC1 112 – Machining Process II (3) hnology TC1 123 – CNC Milling Operations and Programming (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology Manufacturing Technology Logistics/Transportation/Di	TC1 144 – Wire Electrical Discharge Machining (3) TC1 146 – Team Dynamics in Manufacturing (3)		
] Man ] Man ] Man ] Man	nufactur nufactur nufactur nufactur	ring Tec ring Tec ring Tec ring Tec ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3) hnology TC1 112 – Machining Process II (3) hnology TC1 123 – CNC Milling Operations and Programming (3) hnology TC1 137 – CNC Turning Operations and Programming (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology Manufacturing Technology Logistics/Transportation/Di Computer Information Syste	TC1 144 – Wire Electrical Discharge Machining (3) TC1 146 – Team Dynamics in Manufacturing (3) stribution 152 – Introduction to Business Logistics (3)		
] Man ] Man ] Man ] Man ] Man	nufactur nufactur nufactur nufactur nufactur	ring Tec ring Tec ring Tec ring Tec ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3) hnology TC1 112 – Machining Process II (3) hnology TC1 123 – CNC Milling Operations and Programming (3) hnology TC1 137 – CNC Turning Operations and Programming (3) hnology TC1 201 – Supervised Work-based Learning (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology Manufacturing Technology Logistics/Transportation/Di Computer Information Syste Engineering 111 – Introduct	TC1 144 – Wire Electrical Discharge Machining (3) TC1 146 – Team Dynamics in Manufacturing (3) stribution 152 – Introduction to Business Logistics (3) ems 120 – Introduction to Microcomputers (3)		
] Man ] Man ] Man ] Man ] Man ] Man	nufactur nufactur nufactur nufactur nufactur nufactur	ring Tec ring Tec ring Tec ring Tec ring Tec ring Tec ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3) hnology TC1 123 – CNC Milling Operations and Programming (3) hnology TC1 137 – CNC Turning Operations and Programming (3) hnology TC1 201 – Supervised Work-based Learning (3) hnology TC1 253 – Pneumatics (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology Manufacturing Technology Logistics/Transportation/Di Computer Information Syste Engineering 111 – Introduct	TC1 144 – Wire Electrical Discharge Machining (3) TC1 146 – Team Dynamics in Manufacturing (3) stribution 152 – Introduction to Business Logistics (3) ems 120 – Introduction to Microcomputers (3) tion to the Engineering Profession (2) ring Graphics and Introduction to Design (3)		
Man Man Man Man Man Man Man Man	nufactur nufactur nufactur nufactur nufactur nufactur nufactur	ring Tec ring Tec ring Tec ring Tec ring Tec ring Tec ring Tec	MINIMUM TOTAL FOR DEGRE PROGRAM ELE hnology TC1 151 – Introduction to Welding (3) hnology TC1 112 – Machining Process II (3) hnology TC1 123 – CNC Milling Operations and Programming (3) hnology TC1 137 – CNC Turning Operations and Programming (3) hnology TC1 201 – Supervised Work-based Learning (3) hnology TC1 253 – Pneumatics (3) hnology TC1 255 – Industrial Hydraulics (3)		68 CREDIT HOURS 62 CREDIT HOURS / 4 SEMESTERS VES (AAS) Manufacturing Technology Manufacturing Technology Manufacturing Technology Logistics/Transportation/Di Computer Information Syste Engineering 111 – Introduct Engineering 131 – Engineer	TC1 144 – Wire Electrical Discharge Machining (3) TC1 146 – Team Dynamics in Manufacturing (3) stribution 152 – Introduction to Business Logistics (3) ems 120 – Introduction to Microcomputers (3) tion to the Engineering Profession (2) ring Graphics and Introduction to Design (3) ive Geometry (3)		

**Advanced Manufacturing** 



AAS 0770 BC (QA) 0729 BC (W) 0765

## **PATHWAY:** Manufacturing Technology: Welding

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a degree in Manufacturing Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Quality Assurance (QA), a Basic Certificate in Welding (W), and an Associate in Applied Science (AAS) in Manufacturing Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Manufacturing Technology offers the technologies required for maintenance mechanics in the manufacturing or service industries and covers theory and practical projects. The program is appropriate for career changers, high school graduates, general education diploma holders, and machining workers with a need to enhance their careers.

Welding is a challenging and rewarding career that combines the manual techniques of traditional welding processes with new digital skills used in robotic welding. With continual advances in welding technology, students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts. The welding processes that students will master include Gas Metal Arc Welding (GMAW or "MIG" welding), Shielded Metal Arc Welding (SMAW or "stick"), and Gas Tungsten Arc Welding (GTAW or "TIG"). Automated welding is taught using a FANUC robot and controller with a Lincoln Electric welder. Basic Certificate completers will be able to gain jobs as welders and entry level jobs in automated (or robotic) welding.

#### Choose your courses with your College Advisor.

	l mathematics pre-degree ASS, ACT or department ch	requirements. Placements air recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	□ Fine Arts/Humanities: Art	College Success	
ESL/English 98	ESL/Reading 99	FS Mathematics II	103, Music 121, Fine Arts 104, African-American Studies 101		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	□ Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D BCQ4	BCw	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	•	Manufacturing Technology 151 – Introduction to Welding (3)	Required Program Core		
• •	•	Manufacturing Technology 191 – Industrial Electricity (4)	Required Program Core		
• •	•	Manufacturing Technology 139 – Print Requirements and Quality Assurance (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
• •	•	Manufacturing Technology 141 – Manufacturing Materials and Processes (3)	Required Program Core		
• •	•	English 101 – Composition I (3)	Communications		
			16 CREDIT HOURS		
D BC <sup>Q4</sup>	BCw	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
D BC <sup>Q4</sup>	BC <sup>w</sup>	SEMESTER 2 Manufacturing Technology 104 – Statistical Process Control (3)	CATEGORY Required Program Core	ACHIEVEMENTS & NEXT ACTIONS COMPLETION of Basic Certificate in Quality	
D BC <sup>Q4</sup>	BC <sup>w</sup>			COMPLETION of Basic Certificate in Quality Assurance	
D BC <sup>QA</sup> • •	BC <sup>w</sup>	Manufacturing Technology 104 – Statistical Process Control (3)	Required Program Core	COMPLETION of Basic Certificate in Quality Assurance COMPLETION of Basic Certificate in Welding ALMOST halfway through Associate in Applied	
D BC <sup>Q,4</sup>	• BC <sup>w</sup>	Manufacturing Technology 104 – Statistical Process Control (3) Manufacturing Technology 138 – Introduction to SolidWorks (3)	Required Program Core Required Program Core	COMPLETION of Basic Certificate in Quality Assurance COMPLETION of Basic Certificate in Welding ALMOST halfway through Associate in Applied Science	
D BC <sup>Q2</sup>	• BC* • • • • • • • • • • • • • • • • • • •	Manufacturing Technology 104 – Statistical Process Control (3) Manufacturing Technology 138 – Introduction to SolidWorks (3) Manufacturing Technology 152 – Intermediate Welding (3)	Required Program Core Required Program Core Required Program Core	COMPLETION of Basic Certificate in Quality Assurance COMPLETION of Basic Certificate in Welding ALMOST halfway through Associate in Applied	

Advanced Manufacturing

## (continued from previous page)

	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS					
• •	Manufacturing Technology 111-1 – Machining Processes (3)		Required Program Core						
• •	Manufacturing Technology 140 – CNC Fundamentals (3)		Required Program Core         DO THIS – Go to Career Center to explore continued education and employment option						
• •	Manufacturing Technology 292 – Principles of Mechanisms (3)								
• •	Mathematics 125 – Introductory Statistics (4)		Mathematics/Science	DO THIS – Mid-term check-in with advisor					
• •	Social/Behavioral Sciences course (3)		Social/Behavioral Sciences (HD)						
			16 CREDIT HOURS						
	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS					
• •	Humanities/Fine Arts course (3)		Humanities/Fine Arts	_					
• •	Program Elective (3)		Program Elective	COMPLETION of Associate in Applied Science					
• •	Program Elective (3)		Program Elective	in Manufacturing Technology DO THIS – Apply online for degree and					
• •	Program Elective (3)		Program Elective	graduation					
• •	General Education course (3)		General Education						
			15 CREDIT HOURS						
	MINIMUM TOT	AL:	62 CREDIT HOURS						
PROGRAM ELECTIVES (AAS)									
	TROOMANTE	LECII	VES (AAS)						
□ Manufactur	ing Technology TC1 151 – Introduction to Welding (3)			5 – Computer Integrated Manufacturing (CIM) (3)					
		_	Manufacturing Technology TC1 14	5 – Computer Integrated Manufacturing (CIM) (3) 4 – Wire Electrical Discharge Machining (3)					
□ Manufactur	ing Technology TC1 151 – Introduction to Welding (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14						
<ul><li>Manufactur</li><li>Manufactur</li></ul>	ing Technology TC1 151 – Introduction to Welding (3) ing Technology TC1 112 – Machining Process II (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Manufacturing Technology TC1 14	4 – Wire Electrical Discharge Machining (3)					
<ul><li>Manufactur</li><li>Manufactur</li><li>Manufactur</li></ul>	ing Technology TC1 151 – Introduction to Welding (3) ing Technology TC1 112 – Machining Process II (3) ing Technology TC1 123 – CNC Milling Operations and Programming (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Logistics/Transportation/Distribution	4 – Wire Electrical Discharge Machining (3) 6 – Team Dynamics in Manufacturing (3)					
<ul> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> </ul>	ing Technology TC1 151 – Introduction to Welding (3) ing Technology TC1 112 – Machining Process II (3) ing Technology TC1 123 – CNC Milling Operations and Programming (3) ing Technology TC1 137 – CNC Turning Operations and Programming (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Logistics/Transportation/Distribution	<ul> <li>4 – Wire Electrical Discharge Machining (3)</li> <li>6 – Team Dynamics in Manufacturing (3)</li> <li>on 152 – Introduction to Business Logistics (3)</li> <li>0 – Introduction to Microcomputers (3)</li> </ul>					
<ul> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> </ul>	ing Technology TC1 151 – Introduction to Welding (3) ing Technology TC1 112 – Machining Process II (3) ing Technology TC1 123 – CNC Milling Operations and Programming (3) ing Technology TC1 137 – CNC Turning Operations and Programming (3) ing Technology TC1 201 – Supervised Work-based Learning (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Logistics/Transportation/Distributi Computer Information Systems 120 Engineering 111 – Introduction to t	<ul> <li>4 – Wire Electrical Discharge Machining (3)</li> <li>6 – Team Dynamics in Manufacturing (3)</li> <li>on 152 – Introduction to Business Logistics (3)</li> <li>0 – Introduction to Microcomputers (3)</li> </ul>					
<ul> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> </ul>	ing Technology TC1 151 – Introduction to Welding (3) ing Technology TC1 112 – Machining Process II (3) ing Technology TC1 123 – CNC Milling Operations and Programming (3) ing Technology TC1 137 – CNC Turning Operations and Programming (3) ing Technology TC1 201 – Supervised Work-based Learning (3) ing Technology TC1 253 – Pneumatics (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Logistics/Transportation/Distributi Computer Information Systems 120 Engineering 111 – Introduction to t	<ul> <li>4 – Wire Electrical Discharge Machining (3)</li> <li>6 – Team Dynamics in Manufacturing (3)</li> <li>on 152 – Introduction to Business Logistics (3)</li> <li>D – Introduction to Microcomputers (3)</li> <li>the Engineering Profession (2)</li> <li>aphics and Introduction to Design (3)</li> </ul>					
<ul> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> <li>Manufactur</li> </ul>	ing Technology TC1 151 – Introduction to Welding (3) ing Technology TC1 112 – Machining Process II (3) ing Technology TC1 123 – CNC Milling Operations and Programming (3) ing Technology TC1 137 – CNC Turning Operations and Programming (3) ing Technology TC1 201 – Supervised Work-based Learning (3) ing Technology TC1 253 – Pneumatics (3) ing Technology TC1 255 – Industrial Hydraulics (3)		Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Manufacturing Technology TC1 14 Logistics/Transportation/Distributi Computer Information Systems 120 Engineering 111 – Introduction to to Engineering 131 – Engineering Gra	<ul> <li>4 – Wire Electrical Discharge Machining (3)</li> <li>6 – Team Dynamics in Manufacturing (3)</li> <li>on 152 – Introduction to Business Logistics (3)</li> <li>0 – Introduction to Microcomputers (3)</li> <li>the Engineering Profession (2)</li> <li>aphics and Introduction to Design (3)</li> <li>metry (3)</li> </ul>					



# BUSINESS AND PROFESSIONAL SERVICES

COLLEGE TO CAREERS LOCATION: HAROLD WASHINGTON COLLEGE

**From a Fortune 500 company** to the corner bakery, every successful business is the result of many professional disciplines working in tandem. Someone must work with the accounts, analyze data to interpret trends, create a marketing strategy, and manage the overall business plan. Whether you prefer keeping track of numbers or you want to let your creativity shine, all of these things can happen in the right business role. If you are interested in accounting, management, marketing, real estate, or starting your own small business, Business and Professional Services is the right focus area for you.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

		D	AC	BC
Accounting (pg. 24)	٠	•	•	
Business Administration – Genera	al Business (pg. 24)	٠	•	٠
Business/Economics (pg. 26)		•	۰	۰
Insurance (pg. 27)		•	0	۰
Library Technical Assistant (pg. 2	9)	•	0	•
Management/Marketing (pg. 30)		•	•	•
Paralegal (pg. 32, 33)		•	0	•
Real Estate Broker Pre-Licensure	(pg. 34)	٠	0	•
Students in Business and Professional Servi	ices may take classes like the	following:		
Mathematics 125	Introduction to Statistics May require taking mathematics rea	diness cours	es	
Business 111	Introduction to Business			
Economics 201	Principles of Economics I			
Business 181	Financial Accounting			
D = DEGREE // AC = ADVANCED CERTI	FICATE // <b>BC</b> = BASIC CERT	IFICATE		

**Business and Professional Services** 



**PATHWAY:** Accounting

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Accounting. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC) in Business Administration/General Business (GB) and a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Accounting (A). One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Accounting is the study of basic accounting skills. Completion of the program can lead to various levels of accounting positions in accounting firms, retail stores, manufacturing, service business, and small business employment as a junior member of an accounting staff, estimator, credit analyst, budget or general accountant, bank teller, and accounts receivable or accounts payable clerk.

The AC program in Business Administration/General Business is the study of basic business administration which can lead to employment in management positions in business, industry or government such as accounting, economics, finance, labor economics, marketing, and personnel management.

#### Choose your courses with your College Advisor.

	mathematics pre-degree ASS, ACT or department ch	requirements. Placements air recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	□ Fine Arts/Humanities: (May	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	□ Business 111	
□ ESL 99	ESL/Reading 100	Mathematics 98	Studies 101	□ Business 141	
ESL/English 100	Reading 125	□ Mathematics 99		Computer Information Systems 120	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC <sup>A</sup>	ACGB	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	٠	Business 111 – Introduction to Business (3)	Required Program Core*		
•	•	۰	•	Business 141 – Business Mathematics (3) <b>OR</b> Mathematics 118 – General Education Mathematics (4) <b>OR</b> above	Required Program Core**	* DO THIS – Meet with advisor to confi Basic Certificate completion plans	
٠	Computer Information Systems 120 – Introduction to Microcomputers (3)		Required Program Core***	DO THIS – Meet with advisor to discuss			
•	•	۰	٠	English 101 – Composition I (3)	Communications	academic goals and plan coursework	
٠	•	•	Business 181 – Financial Accounting (4)     Required Program Core				
					16-17 CREDIT HOURS		
D	ACA		-		0.4750.001/		
	AC	ACGB	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	AC <sup>65</sup>	BC •	Business 182 – Managerial Accounting (4)	CATEGORY Required Program Core	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	• •			ACHIEVEMENTS & NEXT ACTIONS	
•	•	• •	• •	Business 182 – Managerial Accounting (4) Business 211 – Business Law I <b>OR</b>	Required Program Core	COMPLETION of Basic Certificate in Accounting DO THIS – Meet with advisor to discuss	
•	• • •	• • •	• • •	Business 182 – Managerial Accounting (4) Business 211 – Business Law I <b>OR</b> Business 214 – Legal and Social Environment Business (3)	Required Program Core Required Program Core	COMPLETION of Basic Certificate in Accounting	
• • • •	• • •	• • •	BC • •	Business 182 – Managerial Accounting (4) Business 211 – Business Law I <b>OR</b> Business 214 – Legal and Social Environment Business (3) Business 241 – Introduction to Finance (3)	Required Program Core Required Program Core Required Program Core****	COMPLETION of Basic Certificate in Accounting DO THIS – Meet with advisor to discuss	

\*Business 111 is a Required Program Core for the AAS, but is a Program Elective for the AC(A) and BC

\*\*Business 141 is a Required Program Core for the AAS, but is a Program Elective for the BC

\*\*\*Computer Information Systems 120 is a Required Program Core for the AAS, but is a Program Elective for the AC(A) and BC

\*\*\*\*Business 241, 204, 208, and 205 are Required Program Cores for the AAS, but are Program Electives for the AC(GB)

\*\*\*\*\*Business 250 is a Required Program Core for the AAS, but is a Program Elective for AC(A)

## (continued on next page)

AC (A) 0003 AC (GB) 0042 BC 0002

#### (continued from previous page)

D	AC <sup>A</sup>	ACGB	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•		Business 204 – Computer Applications Intermediate Accounting (1)	Required Program Core****	
•	٠	•	0	Business 208 – Federal Income Tax (3)	Required Program Core****	COMPLETION of Advanced Certificate
•	•	•	0	Business 205 – Intermediate Accounting (3)	Required Program Core****	in Accounting
•	•	0	0	Business 250 – Computerized Accounting Systems (3)	Required Program Core*****	DO THIS – Apply online for advanced
•	0	0	•	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	<ul> <li>certificate</li> <li>DO THIS – Meet with advisor to confirm</li> </ul>
•	0	٥	0	Mathematics 125 – Introductory Statistics (4) <b>OR</b> Mathematics 140 – College Algebra (4) <b>OR</b> Mathematics 144 – Finite Mathematics (4) <b>OR</b> Mathematics 204 – Calculus for Business and Social Sciences (4-5)	Mathematics/Science	courses for completion of Associate in Applied Science degree
					17-18 CREDIT HOURS	
D	AC <sup>A</sup>	ACGB	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	٠	٠	Business 206 – Auditing (3)	Required Program Core	COMPLETION of Associate in Applied
•	٠	•	٠	Business 204 – Computer Applications Intermediate Accounting – Part II (1)	Required Program Core	Science Degree in Accounting COMPLETION of Advanced Certificate i
•	٠	•		Economics 202 – Principles of Economics II (3)	Social/Behavioral Sciences	Business Administration/General Business DO THIS – Apply online for degree and
•	۰	۰	۰	Business 207 – Intermediate Accounting II (3) <b>OR</b> Business 203 – Cost Accounting (3)	Required Program Core	graduation DO THIS – Apply online for Advanced
•	0	٠	0	Computer Information Systems Elective (3)	Elective	Certificate
					13 CREDIT HOURS	
				MINIMUM TOTAL:	62 CREDIT HOURS	

\*Business 111 is a Required Program Core for the AAS, but is a Program Elective for the AC(A) and BC

\*\*Business 141 is a Required Program Core for the AAS, but is a Program Elective for the BC

\*\*\*Computer Information Systems 120 is a Required Program Core for the AAS, but is a Program Elective for the AC(A) and BC

\*\*\*\*Business 241, 204, 208, and 205 are Required Program Cores for the AAS, but are Program Electives for the AC(GB)

\*\*\*\*\*Business 250 is a Required Program Core for the AAS, but is a Program Elective for AC(A)

Program E	ilectives
BASIC CERTIFICATE ELECTIVES	ADVANCED CERTIFICATE (GB) ELECTIVES
Business 111 – Introduction to Business (3)	Business 203 – Introduction Cost Accounting (3)
Business 141 – Business Mathematics (3)	Business 204 – Computer Applications in Accounting (1)
Business 203 – Introduction to Cost Accounting	Business 205 – Intermediate Accounting I (3)
Business 204 – Computer Applications Intermediate Accounting (1)	Business 212 – Business Law II (3)
Business 205 – Intermediate Accounting (3)	□ Business 230 – E–Business (3)
Business 206 – Auditing (3)	Business 231 – Principles of Marketing (3)
Business 211 – Business Law I (3)	Business 232 – Fundamentals of International Business (3)
Business 208 – Federal Income Tax (3)	Business 241 – Introduction to Finance (3)
Business 250 – Computerized Accounting Systems (3)	Business 269 – Principles of Management (3)
Computer Information Systems 120 – Introduction to Microcomputers (3)	Computer Information Systems 101 – Computer Science 101 (3)
Computer Information Systems 123 – Introduction to Spreadsheets on Microcomputers (3)	Economics 201 – Principles of Economics I (3)
Computer Information Systems 145 – Introduction to Database on Microcomputers (3)	Economics 202 – Principles of Economics II (3)
Computer Information Systems 158 – Beginning Internet (3)	Entrepreneurship 201 – Introduction to Entrepreneurship (3)
	Entrepreneurship 202 – Opportunity, Recognition, and Development (3)
ADVANCED CERTIFICATE (A) ELECTIVES	ASSOCIATE IN APPLIED SCIENCE ELECTIVES
Business 141 – Business Mathematics (3)	□ Computer Information Systems 203 – Introduction to Cost Accounting (3)
Business 203 – Introduction to Cost Accounting (3)	□ Computer Information Systems 123 – Introduction to Spreadsheets on Microcomputers (3)
Business 206 – Auditing (3)	□ Computer Information Systems 145 – Introduction to Database on Microcomputers (3)
Business 211 – Business Law (3)	Computer Information Systems 158 – Beginning Internet (3)
□ Business 250 – Computerized Accounting Systems (3)	
Computer Information System 120 – Introduction to Microcomputers (3)	
Computer Information System 123 – Introduction to Spreadsheets on Microcomputers (3)	
□ Computer Information Systems 145 – Introduction to Database on Microcomputers (3)	
□ Computer Information Systems 158 – Beginning Internet (3)	



D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU

**Business and Professional Services** 



## **PATHWAY:** Business/Economics

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This area of study combines business classes with courses in economics. An Associate in Arts with a business emphasis prepares you to transfer to a four-year university to earn a Bachelor's degree that opens the door to a career in business, management, marketing, accounting, investment banking, stock market trading and lots more. This pathway will supply you with basic tools you need to meet the demands of the workforce economy.

This is an **example course sequence** for students interested in pursuing Business. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you earn your associate degree, which will increase your chances of transfer to bachelor's-level programs. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	l mathematics pre-degree ASS, ACT or department ch	requirements. Placements nair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	Business 111
ESL/English 100	□ Reading 125	□ Mathematics 99		□ Computer Information Systems 120
				□ Computer Information Systems 123

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	English 101 – Composition I (3)	Communications		
•	٠	Mathematics 140 – College Algebra (4)	Elective		
•	٠	Fine Arts course (3)	Fine Arts	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools	
•	•	Social Science 102 – General Course II (3)	Social/Behavioral Sciences		
•	۰	Business 181 – Financial Accounting (4)	Program Elective		
			17 CREDIT HOURS		
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
D	GECC	SEMESTER 2 English 102 – Composition II (3)	CATEGORY Communications	ACHIEVEMENTS & NEXT ACTIONS	
D •	GECC			DO THIS – Mid-term check-in with advisor	
D • •	GECC • •	English 102 – Composition II (3)	Communications	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to	
D • •	GECC	English 102 – Composition II (3) Speech 101 – Fundamentals of Speech Communication (3)	Communications Communications	DO THIS – Mid-term check-in with advisor	
D • • •	GECC	English 102 – Composition II (3) Speech 101 – Fundamentals of Speech Communication (3) Mathematics 141 – Trigonometry (3)	Communications Communications Mathematics	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year	

### (continued from previous page)

D GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Economics 202 – Microeconomics (3)	Social/Behavioral Sciences		
•	Physical Sciences course (4)	Physical Sciences		
•	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year func outlets such as scholarships and financial aid DO THIS – Prepare documentation	
•	Business 203 – Introduction to Cost Accounting (3) <b>OR</b> Business 211 – Business Law I (3) <b>OR</b> Business 214 – Legal and Social Environment of Business (3) <b>OR</b> Business 231 – Principles of Marketing (3) <b>OR</b> Business 250 – Computerized Accounting Systems (3) <b>OR</b> Business 269 – Principles of Management (3)	Elective		
		13 CREDIT HOURS		
GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Philosophy 105 – Logic (3)	Humanities		
•	Business 203 – Introduction to Cost Accounting (3) <b>OR</b> Business 211 – Business Law I (3) <b>OR</b> Business 214 – Legal and Social Environment of Business (3) <b>OR</b> Business 231 – Principles of Marketing (3) <b>OR</b> Business 250 – Computerized Accounting Systems (3) <b>OR</b> Business 269 – Principles of Management (3)	Elective	COMPLETION of Associate in Arts degree DO THIS – Apply to four-year schools of your choice	
•	Life Sciences course (4)	Life Sciences	DO THIS – Apply online for degree and graduation	
•	Program Elective (3)	Elective		
•	Mathematics 204 – Calculus for Business and Social Sciences (5) <b>OR</b> Mathematics 207 – Calculus I (5)	Elective		
		18 CREDIT HOURS		
	MINIMUM TOTAL:	64 CREDIT HOURS		

#### D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (PA) (KK) (MX) (PH) (TB) (HW) (WB)



## **PATHWAY:** Insurance

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This program prepares students to provide insurance and risk management service to people, businesses and other organizations. If you study insurance, you'll learn about helping companies create safe working conditions, as well as other aspects of risk management. Students in this pathway will learn sales, communications, record management, and more.

This is an **example course sequence** for students interested in earning an Associate in Arts (AA) degree in Insurance. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

### (continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

>	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	•	English 101 – Composition I (3)	Communications		
	•	Mathematics 125 – Introductory Statistics (4)	Mathematics		
	•	Philosophy 105 – Logic (3)	Humanities	DO THIS – Meet with advisor to confirm plans DO THIS – Begin researching four-year schools	
	٠	Business 221 – Introduction to Insurance (3)	Elective		
	•	Fine Arts course (3)	Fine Arts		
			16 CREDIT HOURS		
	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	•	English 102 – Composition II (3)	Communications		
	•	Speech 101 – Fundamentals of Speech Communication (3)	Communications	DO THIS – Mid-term check-in with advisor	
	٠	Business 281 – Business Processes (3)	Elective	DO THIS – Visit your campus Transfer Center to disc options and create a short list of four-year schools for	
	•	Life Sciences course (4)	Life Sciences	potential transfer	
	•	Economics 201 – Principles of Economics I (3)	Social/Behavioral Sciences		
			16 CREDIT HOURS		
	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)		
	۰	Computer Information Systems 299 – Special Topics (Adv. Spreadsheet/PPT) (4)	Elective	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year funding	
	٠	Business 284 – Business Communications (3)	Elective	outlets such as scholarships and financial aid	
	٠	Business 181 – Financial Accounting (4)	Elective	DO THIS – Prepare documentation	
	•	Economics 202 – Principles of Economics II (3)	Social/Behavioral Sciences		
			17 CREDIT HOURS		
	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	•	Business 182 – Managerial Accounting (4)	Elective		
	٠	Physical Sciences course (3)	Physical Sciences	COMPLETION of Associate in Arts Degree in Insuranc	
	•	Business 272 – Sales Management (3)	Elective	DO THIS – Apply to four-year schools of your choice DO THIS – Apply online for degree and graduation	
	•	Philosophy 107 – Ethics (3)	Humanities		
			13 CREDIT HOURS		
		MINIMUM TOTAL	: 62 CREDIT HOURS		

**D** = DEGREE // **AC** = ADVANCED CERTIFICATE // **BC** = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT **CCC.EDU** 



EGREE CODES AAS 0303 BC 0330

## **PATHWAY:** Library Technical Assistant

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in the Library Technical Assistant program. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) and an Associate in Applied Science (AAS) Degree in Library Technical Assistant. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS in Library Technical Assistant can lead to employment as an assistant to a professional librarian in cataloguing periodicals, multi-media or information services of public, private, industrial, or school libraries.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	Computer Information Systems 120
□ ESL 99	ESL/Reading 100	Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

			are allowed additionally additing the		
D	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Library Technology 101 – Introduction to Library Procedures (3)	Required Program Core		
•	•	Library Technology 102 – Multimedia Technologies (3)	Required Program Core		
•	0	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
•	0	English 101 – Composition I (3)	Communications		
•	0	Elective (3)	Elective		
			15 CREDIT HOURS		
D	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Library Technology 201 – Library Public Service (3)	Required Program Core	COMPLETION of Basic Certificate in Library	
•	•	Library Technology 203 – Materials Preparation (3)	Required Program Core	Technical Assistant	
•	0	Computer Information Systems 158 – Beginning Internet (3)	Required Program Core	ALMOST halfway through Associate of Applie Science degree	
•	0	Speech 101 – Fundamentals of Speech Communications (3)	Communications	DO THIS – Meet with advisor to confirm plan	
•	0	Elective (3)	Elective	for after graduation	
			15 CREDIT HOURS		
D	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	0	Humanities/Fine Arts course (3)	Humanities/Fine Arts		
•	0	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	DO THIS – Go to both Transfer Center and Career Center to explore continued education	
•	0	Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	and employment options	
•	0	Elective (3)	Elective	DO THIS – Meet with advisor to confirm plan after graduation	
•	0	Elective (3)	Elective		
			16 CREDIT HOURS		

### (continued from previous page)

D	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•		Library Technology 125 – Learning Resource/Library Practicum (6)	Required Program Core	
•	Social/Behavioral Sciences course (3)     Social/I		Social/Behavioral Sciences	COMPLETION of Associate in Applied Science degree in Library Technical Assistant
•	0	Elective (3)	Elective	DO THIS – Apply online for degree and
•	0	Elective (3)	Elective	graduation
			15 CREDIT HOURS	
		MINIMUM TOTAL:	61 CREDIT HOURS	
D =	DEGI	REE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE	Programs	



DEGREE CODES: AAS 0021 AC 0022 BC 0023

## PATHWAY: Management/Marketing

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Management/Marketing. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Management/Marketing. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Management/ Marketing is the study of basic business skills along with more in-depth study in a chosen field such as management, marketing, or entrepreneurship. Completion of the program can lead to employment as assistant, trainee, supervisor, or manager in manufacturing, merchandising, service firms, or government service. The program also prepares graduates to start a business or improve the operations of a currently existing business.

#### Choose your courses with your College Advisor.

	l mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		ses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (May	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	Business 111
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	Business 141
ESL/English 100	Reading 125	□ Mathematics 99		Computer Information Systems 120

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	•	Business 111 – Introduction to Business (3)	Required Program Core	
•	•	٠	Business 141 – Business Mathematics (3) (Can be substituted with Mathematics 118 or above, strongly recommend Mathematics 140, 144, 204, or 207)	Required Program Core	DO THIS – Meet with advisor to
•	٠	۰	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	discuss academic goals and plan coursework
•	٠	•	English 101 – Composition I (3)	Required Program Core*	COUSEWORK
•	•	•	Business 181 – Financial Accounting (4)	Required Program Core	
				16 CREDIT HOURS	

**Business and Professional Services** 

#### (continued from previous page)

D	AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	۰	Business 182 – Managerial Accounting (4)	Required Program Core	
•	•	٠	Business 231 – Marketing (3)	Required Program Core**	COMPLETION of Basic Certificate in
0	0	٠	Business 236 – Advertising (3)	Program Elective	Management/Marketing DO THIS – Meet with advisor to
•	0	٠	Business 237 – Selling (3)	Program Elective	discuss Advanced Certificate, Associate of Applied Science, and four-year
•	0	•	Business 258 – Small Business (3)	Program Elective	transfer options
•	0	٠	Computer Information Systems 123 – Introduction to Spreadsheets (3)	Program Elective	
				19 CREDIT HOURS	
D	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Business 211 – Business Law I (3) <b>OR</b> Business 212 – Business Law II (3) <b>OR</b> Business 214 – Legal and Social Environment of Business (3)	Required Program Core	COMPLETION of Advanced Certificate
•	٠	٠	Business 241 – Introduction to Finance (3)	Required Program Core	in Management/Marketing DO THIS – Apply online for advanced
•	٠	•	Business 269 – Principles of Management (3)	Required Program Core**	certificate
•	٠	٠	Program Elective (3)	Program Elective	DO THIS – Meet with advisor to confirm courses for completion of
•	0	٠	Program Elective (3)	Program Elective	Associate of Applied Science degree
•	0	۰	Speech 101 – Fundamentals of Speech Communication (3)	Required Program Core*	
				18 CREDIT HOURS	
D	AC	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	٠	Mathematics 204 – Calculus for Business and Social Sciences (5)	Mathematics/Science	
•	0	•	Computer Information Systems 145 – Introduction to Database on Microcomputers (3) <b>OR</b> Computer Information Systems 158 – Beginning Internet (3)	Program Elective	COMPLETION of Associate in Applied Science Degree in Management/
•	0	•	Economics 201 – Principles of Economics I (3) <b>OR</b> Economics 202 – Principles of Economics II (3)	Social/Behavioral Sciences	Marketing DO THIS – Apply online for degree and
•	0	0	Program Elective (3)	Program Elective	graduation
•	۰	•	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	
				17 CREDIT HOURS	
			MINIMUM TOTAL:	70 CREDIT HOURS	

\*English 101 and Speech 101 are Required Program Core for the AC but are General Education requirements for the AAS \*\*Business 231 and 269 are Required Program Core for the AAS and AC but are Program Electives for the BC

#### AAS PROGRAM ELECTIVES

- □ Business 203 Introduction to Cost Accounting (3) □ Business 204 – Computer Applications Inter. Accounting (1)
- □ Business 206 Auditing (3)
- □ Business 208 Federal Income Tax (3)
- □ Business 216 Entrepreneurship (3)
- □ Business 250 Computerized Accounting Systems (3)
- □ Business 271 Human Resources Management (3)

Computer Information Systems 123 – Introduction to Spreadsheets on Microcomputers (3)

- Computer Information Systems 145 Introduction to Data Base on Microcomputers (3)
- □ Computer Information Systems 158 Beginning Internet (3)

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (IPA) (IPA)

**Business and Professional Services** 



## **PATHWAY:** Paralegal

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Paralegal. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree. All prescribed courses on this pathway are required for the degree. Courses may not be substituted. Students should meet with a College Advisor for selection of elective courses.

The AAS degree program for Paralegal prepares students with the necessary skills to become highly trained paralegals to meet the needs of corporations, law firms and offices, and other sectors where law-related work is performed. Students completing an AAS in Paralegal are employable in any area where law-related work is conducted. Paralegals may not provide legal services directly to the public, except as permitted by law. The program is approved by the American Bar Association.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College Level Courses that can be taken while in pre-degree courses
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Computer Information Systems 120
□ ESL 99	ESL/Reading 100	□ Mathematics 98	
ESL/English 100	□ Reading 125	□ Mathematics 99	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 101 – Composition I (3)	Communications	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
	Computer Information Systems 120 – Introduction to Microcomputers (3)	General Education		
•	Business 149 – Family Law (3)	Required Program Core		
•	Business 147 – Introduction to Paralegal Studies (3)	Required Program Core	5 P P	
	Business 148 – Civil Litigation (3)	Required Program Core		
		15 CREDIT HOURS		
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	English 102 – Composition II (3)	Communications		
	Business 222 – Business Law for the Paralegal (3)	Required Program Core	ALMOST halfway through Associate in Applied Science degree DO THIS – Meet with advisor to confirm plans for	
	Business 219 – Real Estate Law for the Paralegal (3)	Required Program Core		
	Business 223 – Tort Law (3)	Required Program Core	after graduation	
	Business 220 – Criminal Law for the Paralegal (3)	Required Program Core		
		15 CREDIT HOURS		
)	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	Business 224 – Wills, Trusts and Probate (3)	Required Program Core		
	Business 150 – Legal Research and Writing I (3)	Required Program Core	<b>DO THIS</b> – Go to both Transfer Center and Career Center to explore continued education and	
	Political Science 201 – The National Government (3)	Social/Behavioral Sciences	employment options DO THIS – Meet with advisor to confirm plans for	
	Program Elective (3)	Elective (3) Program Elective		
	Speech 101 – Fundamentals of Speech (3)	Communications	after graduation	
		15 CREDIT HOURS		

## (continued from previous page)

D	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Business 225 – Legal Research and Writing II (3)	Required Program Core	COMPLETION of Associate in Applied Science degree in Paralegal	
•	Philosophy 105 – Logic (3) <b>OR</b> Philosophy 106 – Introduction to Philosophy (3) <b>OR</b> Philosophy 107 – Ethics (3)	Humanities		
•	Social Science 102 – General Course II (3)	Social/Behavioral Sciences		
•	Iumanities 123 – Introduction to Arts and Ideas (3) <b>OR</b> Humanities Iumanities 201 – General Humanities (3)		DO THIS – Apply online for degree and graduation	
•	Program Elective (3)	Program Elective		
•	Program Elective (3)	Program Elective		
		18 CREDIT HOURS		
	MINIMUM	TOTAL: 63 CREDIT HOURS		

## **PATHWAY:** Paralegal



**DEGREE CODE:** 

BC 0829

#### Choose your courses with your College Advisor.

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a Basic Certificate (BC) in Paralegal. It does not represent a contract, nor does it guarantee course availability. The Paralegal program prepares students to work in a variety of entry level legal settings, including law firms, small businesses, government agencies, financial institutions, and insurance companies. Students will also gain an understanding into the use of computers/research tools and application of organizational skills in the paralegal industry.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Business Management 244 – Legal Research (1)	Required Program Core	
•	Business Management 245 – Legal Writing (1)	Required Program Core	
•	Business Management 246 – Estates, Wills, and Trust (1)	Required Program Core	
•	Business Management 247 – Criminal Law and Procedure (1)	Required Program Core	
٠	Business Management 248 – Civil Procedure and Litigation (1)	Required Program Core	COMPLETION of Basic Certificate in
•	Business Management 249 – Business Law (1)	Required Program Core	Paralegal DO THIS – Meet with advisor to discuss academic goals and plan coursework
•	Business Management 250 – Contracts (1)	Required Program Core	
•	Business Management 251 – Real Estate and Property Transfer (1)	Required Program Core	
•	Business Management 252 – Family Law (1)	Required Program Core	
•	Business Management 253 – Paralegal Profession: Nature and Scope (1)	Required Program Core	
•	Business Management 254 – Torts/Personal Injury (1)	Required Program Core	
•	Business Management 255 – Paralegal Overview (.5)	Required Program Core	
		11.5 CREDIT HOURS	
	MINIMUM TOTAL:	11.5 CREDIT HOURS	

**Business and Professional Services** 



## **PATHWAY:** Real Estate Broker Pre-Licensure

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate (BC) in Real Estate Broker Pre-Licensure. If this pathway is followed as outlined, you will earn a Basic Certificate. It does not represent a contract, nor does it guarantee course availability. The Real Estate program meets the required course content and hours for the Illinois Department of Financial and Professional Regulations (IDFPR). Students who successfully complete the Real Estate Broker course work and hours are eligible to apply for the state licensure exam. The program is for individuals without any prior IDFPR Real Estate license.

Choose your courses with your College Advisor.

This program requires COMPASS TEST SCORES:

Reading Score: 72 or higher and Mathematics Score: Algebra scores of 49 or higher

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Business Management 238 – IL Real Estate Broker Pre-License (6)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
		6 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Business Management 239 – IL Broker Applied Real Estate Principles: Interactive (1)	Required Program Core	COMPLETION of Basic Certificate in Real Estate Broker Pre-Licensure
		1 CREDIT HOURS	
	MINIMUM TOTAL:	7 CREDIT HOURS	
D	= DEGREE // AC = ADVANCED CERTIFICATE // BC = B	Programs offered at: OA (KK) (MX) (OH) (TR) (HW) (WF	

## PROGRAMS OF STUDY Construction Technology and Drafting



# CONSTRUCTION TECHNOLOGY AND DRAFTING

#### COLLEGE TO CAREERS LOCATION: KENNEDY-KING COLLEGE

**Chicago is home** to some of the most unique and legendary buildings in the world; each of these buildings are the result of the collaboration of thousands of workers in the construction field. From those using the latest CAD technologies to design and engineer the blueprints, to those managing the construction projects and installing necessary amenities such as heating, ventilation and plumbing, all contribute to the industry, creating structures that generations will walk through. If you have an interest in learning more about the construction process, from planning to completion, you should consider the field of Construction Technology and Drafting.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

		D	AC	BC	
Air Conditioning and Refrigeration (p	ig. 36)	•	•	•	
Architectural CAD (pg. 37)		0	٠	٠	
Architectural Drafting (pg. 198)		٠	٠	٠	
Bricklayer (pg. 38)		0	٠	٠	
Building Energy Technologies (pg. 3	9)	0	٠	٠	
CAD Technology (pg. 39)		٠	٠	٠	
Combination Welder (pg. 41)		0	٠	٠	
Communications Technology (pg. 19	98, 199)	٠	٠	٠	
Concrete Masonry (pg. 42)		0	۰	٠	
Construction Carpentry (pg. 43)		0	٠	٠	
Construction Management (pg. 199)	)	٠	٠	٠	
Electrical Construction Technology (	pg. 200, 201)	٠	٠	٠	
Electrical Line Worker (Overhead) (p	g. 44)	0	•	٠	
Gas Utility Worker (pg. 45)		0	٠	٠	
Mechanical Technology: CAD (pg. 4	6)	0	٠	٠	
Plumbing and Fire Protection (pg. 47	7)	0	٠	٠	
Students in Construction Technology and Drafting may take classes like the following:					
Mathematics 107 M	lathematics for Tech	inicians I			
	omposition lay require taking English re	adiness course	25		
Psychology 210 P	rinciples of Supervis	ory Psycho	logy		

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE

**Construction Management 604** 

Requires English 101 eligibility

**Blueprints and Specifications** 

**Construction Technology and Drafting** 



DEGREE CODES: AAS 0117 AC 0118 BC (CR) 0153 BC (DR) 0177 BC (H) 0178

## **PATHWAY:** Air Conditioning and Refrigeration

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Air Conditioning and Refrigeration. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn Basic Certificates (BC's) in Commercial Refrigeration (CR), Domestic Refrigeration (DR) and Heating (H), and an Advanced Certificate (AC) and an Associate in Applied Science (AAS) degree in Air Conditioning and Refrigeration. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS in Air Conditioning and Refrigeration studies the design, selection, maintenance, testing and installation of residential and commercial air conditioning, refrigeration and heating and ventilation systems, and business skills. The degree can lead to self-employment or employment as an assistant to engineers in an industrial or business facility, air conditioning and refrigeration mechanic, furnace installer, oil burner mechanic or a gas furnace mechanic with cooling and heating dealers, contractors, or utility companies.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities:	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Any Art, Music, or Theatre General Education Class, African-	□ Air Conditioning 106	
□ ESL 99	ESL Reading 100	□ Mathematics 98	American Studies 101	Air Conditioning 107	
ESL/English 100	□ Reading 125	□ Mathematics 99	□ Mathematics/Science:	□ Air Conditioning 121	
			Biology 107 or Environmental Technology 107	□ Air Conditioning 156	
				□ Air Conditioning 204	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

					, ,	
D AC	BCCR	BCDR	ВС⊦	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	0	0	۰	Air Conditioning 120 – Introductory Lab (2)	Required Program Core	
• •	۰	0	٠	Air Conditioning 104 – Equipment and Systems Control (3)	Required Program Core	
• •	٠	٠	٠	Air Conditioning 101 – Introduction to Air Conditioning I (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
• •	0	٠	٠	Air Conditioning 150 – Introduction to Refrigeration (3)	Required Program Core	
• •	٠	٠	٠	Mathematics 107 – Mathematics for Technicians (4)	Required Program Core	
					16 CREDIT HOURS	
D AC	BCCR	BCDR	ВСн	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	0	•	•	Mathematics/Science course (3)	Mathematics/Science	
• •	۰	۰	٠	English 101 – Composition I (3)	Communications	
• •	•	٠	٠	Air Conditioning 102 – Introduction to Air Conditioning II (3)	Required Program Core	DO THE Meet with educer to confirm place
	_		_			<b>DO THIS</b> – Meet with advisor to confirm plans

Air Conditioning 105 – Owner Contractor Management (3)
 Required Program Core
 Air Conditioning 151 – Commercial Refrigeration (3)
 Required Program Core
 Air Conditioning 160 – Introduction to Principles of Heating (3)
 Required Program Core
 I8 CREDIT HOURS

(continued from previous page)

	AC	BCCR	BCDR	ВСн	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	•	۰	0	0	Engineering 115 – Engineering Communication/Blueprint (3)	Required Program Core	
	0	٠	0	0	Air Conditioning 107 – Welding I (3)	Program Elective	COMPLETION of Basic Certificate in Domestic
	•	٠	0	•	Air Conditioning 165 – Heating Lab (2)	Required Program Core	Refrigeration
	•	٠	0	•	Air Conditioning 103 – Duct Design and Layout (3)	Required Program Core	COMPLETION of Basic Certificate in Heating DO THIS – Go to both Transfer Center and Care
	•	٠	0	•	Air Conditioning 157 – Analysis Laboratory (2)	Required Program Core	Center to explore both continued education and
	•	٠	•	•	Air Conditioning 155 – Refrigeration Lab (2)	Required Program Core	employment options
	•	٠	۰	•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	
						17 CREDIT HOURS	
>	AC	BCCR	BCDR	ВСн	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	•	•	•	•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	COMPLETION of Associate in Applied Science
	•	٠	۰	•	Air Conditioning 106 – Sheet Metal I (3)	Program Elective	Air Conditioning and Refrigeration COMPLETION of Advanced Certificate in Air
	•	٠	۰	•	Air Conditioning 158 – Commercial Refrigeration Lab (2)	Required Program Core	Conditioning and Refrigeration
	•	٠	0	٠	Air Conditioning 204 – Advanced Control Systems (3)	Program Elective	COMPLETION of Basic Certificate in Commercial Refrigeration
	0	•	0	•	Air Conditioning 156 – Domestic Refrigeration Laboratory (2)	Program Elective	DO THIS – Apply online for advanced certifica
	0	0	0	0	Humanities/Fine Arts Course (3)	Humanities/Fine Arts	DO THIS – Apply online for degree and graduation
						16 CREDIT HOURS	



## **PATHWAY:** Architectural CAD

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a certificate in Architectural CAD. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability.

DEGREE CODE: BC 0132

#### Choose your courses with your College Advisor.

Communications pre-degree requirements, Placements based on COMPASS, ACT or department chair recommendation.

ENGLISH PLACEMENT	READING PLACEMENT
□ ESL/FS Writing	□ ESL/FS Reading
ESL/English 98	□ ESL/Reading 99
□ ESL 99	□ ESL Reading 100

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

 BC
 SEMESTER 1
 CATEGORY
 ACHIEVEMENTS & NEXT ACTIONS

 • Architecture 170 – CAD for Architectural Drafting Technology (3)
 Required Program Core
 DO THIS – Meet with advisor to discuss academic goals and plan coursework

 • 3 CREDIT HOURS
 CREDIT HOURS

## **Construction Technology and Drafting**

### (continued from previous page)

BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
٠	Architecture 171 – CAD II for Architectural Drafting Technology (3)	Required Program Core	COMPLETION of Basic Certificate in Architectural CAD		
•	Architecture 172 – CAD III for Architectural Drafting Technology (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans		
		6 CREDIT HOURS			
	MINIMUM TOTAL:	9 CREDIT HOURS			
Plea	Please note, the BC requires a minimum of 9 hours, although the sequence above may include additional hours.				

ase note, the BC requires a minimum of 9 hours, although the sequence above may incluc

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 0A (KK (MR) OH) TR (MR) (WR)



DEGREE CODE: BC 0760

## **PATHWAY:** Bricklayer

#### Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in pursuing Bricklayer. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Bricklayer.

The courses below will allow you to earn a BC from the City Colleges of Chicago. The BC program for Bricklaying is designed to provide students with an understanding of the bricklaying trade. Students will receive hands on training in the building of solid walls and chimneys, using bricks and block and a range of bonds as well as learning basic blueprint reading. Completion of this degree will prepare students for a career as a Stonemason.

#### Choose your courses with your College Advisor.

Student must be eligible for Reading 99 and Mathematics 98 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.						
READING PLACEMENT	MATHEMATICS PLACEMENT					
□ FS Reading	□ FS Mathematics					

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 1		
•	Technology 442 – Introduction to Bricklaying (3)	Required Program Core	
•	Technology 443 – Bricklaying Tools and Equipment (2)	Required Program Core	
•	Technology 429 – Basic Mathematics and Specifications (2)	Required Program Core	COMPLETION of Basic Certificate in Bricklayer
•	Business and Commercial Technology 532 – Basic Computer Technology (1)	Required Program Core	DO THIS – Meet with advisor to confirm plans
	Phase 2		Center to explore both continued education and
•	Technology 428 – Mortar (3)	Required Program Core	employment options
	Phase 3		
•	Technology 444 – Bricklaying Installation Procedures (3)	Required Program Core	
•	Technology 767 – Blueprint Reading (2)	Required Program Core	
		16 CREDIT HOURS	
	MINIMUM TOTAL:	16 CREDIT HOURS	
	e note, the BC requires a minimum of 16 hours, although the sequence abov DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIF		grams offered at: (DA) (KK) (MX) (DH) (TR) (HW)

**Construction Technology and Drafting** 



DEGREE CODE: BC 0159

## **PATHWAY:** Building Energy Technologies

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate (BC) in Building Energy Technologies. If pathway is followed as outlined, student will earn a BC in Building Energy Technologies. This does not represent a contract, nor does it guarantee course availability.

The courses listed above allow you to earn a BC from the City Colleges of Chicago. The BC program in Building Energy Technologies is designed for students seeking expertise in the practical application of energy efficiency and renewable energy systems in the building construction industries. An emphasis on integration into traditional building construction and operation allows the graduate to effectively coordinate with architects, engineers, and contractors on the installation and operation of these systems.

Choose your courses with your College Advisor.

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Environmental Technology 104 – Energy Systems Fundamentals (3)	Required Program Core	
٠	Environmental Technology 114 – Renewable Energy Systems (4)	Required Program Core	DO THIS – Meet with advisor to confirm plans
٠	Environmental Technology 144 – Building Systems Maintenance (4)	Required Program Core	
		11 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Environmental Technology 204 – Residential Energy Systems (3)	Required Program Core	
٠	Environmental Technology 214 – Institutional Energy Systems (3)	Required Program Core	COMPLETION of Basic Certificate in Building Energy Technologies
٠	Environmental Technology 244 – Energy Equipment Troubleshooting (4)	Required Program Core	
		10 CREDIT HOURS	
	MINIMUM TOTAL:	21 CREDIT HOURS	

Please note, the BC requires a minimum of 21 hours, although the sequence above may include additional hours.

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (MX) (DH) (TR) (HW)



PATHWAY: CAD Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in CAD Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in CAD Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Computer-Aided Design (CAD) Technology provides the technical instruction and skill development for the graduate to become successfully employed in the drafting fields of the mechanical, architectural, and construction industry. Instruction is directed toward theoretical and technical skills in the use of modern drafting tools and equipment with emphasis placed on the training of CAD techniques.

DEGREE CODES: AAS 0144 AC 0138 BC 0139

#### Choose your courses with your College Advisor.

	nematics pre-degree requirem CT or department chair recon	College-level courses that can be taken while in pre-degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	CAD Technology
□ ESL 99	ESL Reading 100	□ Mathematics 98	Computer Information Systems 116
ESL/English 100	□ Reading 125	□ Mathematics 99	Computer Information Systems 120
			Computer Information Systems 123

(continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

AC BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	English 101 – Composition I (3)	Communications	DO THIS – Meet with advisor to discuss academic
• •	CAD Technology 130 – CAD Technology I (3)	Required Program Core	goals and plan coursework
• •	Mathematics 140 – College Algebra (4)	Required Program Core*	*Mathematics 140 is Required Program Core for the
• •	Engineering 100 – Elements of Engineering Drawing (3)	Required Program Core	AC and BC but is a General Education requirement i
• •	Engineering 110 – Introductory Drafting (2)	Required Program Core	the AAS
		15 CREDIT HOURS	
AC BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Mathematics 141 – Plane Trigonometry (3)	Required Program Core	
• •	Engineering 131 – Engineering Graphics and Introduction to Design (3)	Required Program Core	
• •	Engineering 111 – Introduction to the Engineering Profession (2)	Required Program Core	DO THIS – Meet with advisor to discuss academic
• •	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	goals and plan coursework
• •	CAD Technology 170 – CAD Technology II (3)	Required Program Core	
• •	Computer Information Systems 103 – Introduction to BASIC Language (3)	Required Program Core	
		17 CREDIT HOURS	
AC BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	CAD Technology 171 – CAD Technology III (3)	Required Program Core	
• •	Engineering 202 – Advanced Drafting and Basic Machine Design (3)	Required Program Core	
• •	Engineering 132 – Descriptive Geometry (3)	Required Program Core	DO THIS – Meet with advisor to confirm courses f completion of Associate of Applied Science degree
• •	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	h
• •	Mathematics 207 – Calculus and Analytic Geometry I (5)	Mathematics/Science	
		17 CREDIT HOURS	
AC BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	CAD Technology 172 – CAD Technology IV (3)	Required Program Core	COMPLETION of Basic Certificate in CAD
• •	Engineering 190 – Computer Application in Engineering (3)	Required Program Core	Technology COMPLETION of Advanced Certificate in CAD
• •	Physics 231 – General Physics I: Mechanics and Wave Motion (4)	Mathematics/Science	Technology
• •	Computer Information Systems 123 – Introduction to Spreadsheets on Microcomputers (3)	Required Program Core	COMPLETION of Associate in Applied Science Degree in CAD Technology DO THIS – Apply online for certificates
• •	Computer Information Systems 116 – Introduction to Operating Systems (3)	Required Program Core	<b>DO THIS</b> – Apply online for degree and graduation
		16 CREDIT HOURS	
	MINIMUM TOTAL:	65 CREDIT HOURS	

Focus Area: Construction Technology & Drafting

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: DA (KK) (MX) (DH) (TB) (HW) (WB)

**Construction Technology and Drafting** 



DEGREE CODE: BC 0758

## **PATHWAY:** Combination Welder

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in pursuing welding. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Welder (Combination).

The Basic Certificate program in Welder (Combination) is designed to provide students with training in basic welding skills in a shop setting. In addition to learning welding mathematics, blueprint reading, layout and fabrication, students are also introduced to the basic fundamentals of job safety and ethics. Graduates of this program are qualified for entry level employment as an ARC, MIG, or TIG welder.

#### Choose your courses with your College Advisor.

Student must be eligible for Mathematics 98 and Reading 99 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.					
READING PLACEMENT	MATHEMATICS PLACEMENT				
□ FS Reading	□ FS Mathematics				

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 1		
•	Technology 509 – Introduction to Basic ARC Welding (3)	Required Program Core	
•	Business and Commercial Technology 532 – Basic Computer Technology (1)	Required Program Core	
•	Technology 518 – Manufacturing Materials and Processes (1)	Required Program Core	
	Phase 2		<ul> <li>COMPLETION of Basic Certificate in Combination Welder</li> <li>DO THIS – Meet with advisor to confirm plans</li> </ul>
•	Technology 510 – Blueprint, Layout, and Fabrication (2)	Required Program Core	DO THIS – Go to both Transfer Center and Career Center to
•	Technology 520 – ARC Welding (4)	Required Program Core	explore both continued education and employment options
	Phase 3		
•	Technology 526 – Welding Mathematics (1)	Required Program Core	
•	Technology 530 – Advanced Welding (4)	Required Program Core	
	MINIMUM TOTAL:	16 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: DA (KK) (MX) (PH) (MR) (WR)

## **Construction Technology and Drafting**



## PATHWAY: Concrete Masonry

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning the Basic Certificate (BC) in Concrete Masonry. If this pathway is followed as outlined, you will earn a BC. This does not represent a contract, nor does it guarantee course availability.

The BC program in Concrete Masonry includes orientation to the cement masonry trade, industry terminology and blueprint reading. Hands on training includes the proper use and maintenance of tools and instruction in job safety procedures. Students will learn the basic ingredients of concrete, rodding placement and floating, basic set-up and form work and clean-up.

#### DEGREE CODE: BC 0759

#### Choose your courses with your College Advisor.

Student must be eligible for Reading 99 and Mathematics 98 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
READING PLACEMENT	MATHEMATICS PLACEMENT	
□ FS Reading	□ FS Mathematics	
□ Reading 99	□ Mathematics 98	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 1		
•	Technology 426 – Introduction to Concrete Masonry (3)	Required Program Core	COMPLETION of Basic Certificate in Concrete Masonry
•	Technology 427 – Masonry Tools and Equipment (2)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Technology 429 – Basic Mathematics and Specifications (2)	Required Program Core	DO THIS – Go to both Transfer Center and Career Center to explore both continued education and employment
•	Business and Commercial Technology 532 – Basic Computer Technology (1)	Required Program Core	options
	Phase 2		Please note, the BC requires a minimum of 16 hours,
•	Technology 428 – Mortar (3)	Required Program Core	although the sequence above may include additional
•	Technology 430 – Masonry Installations Procedures (3)	Required Program Core	hours.
•	Technology 767 – Blue Print Reading I (2)	Required Program Core	
	MINIMUM TOTAL:	16 CREDIT HOURS	
D =	DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERT		rograms offered at: 💿 📧 📖 н 🕬

**Construction Technology and Drafting** 



DEGREE CODE: BC 0775

## **PATHWAY:** Construction Carpentry

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in Construction Carpentry. If this pathway is followed as outlined, student will earn a Basic Certificate (BC) for Construction Carpentry. This does not represent a contract, nor does it guarantee course availability.

The BC in Construction Carpentry prepares students for an entry level apprentice position with a construction contractor. The program provides instruction in tool safety and usage, construction materials, work site safety, blueprint reading, and mathematical concepts. Course content also includes an introduction to the trades and basic ARC welding. Theory and practical "hands-on" application are emphasized throughout the program. Students will receive the OSHA construction Safety and Health 10-hour Certification and Scaffold Certification upon successful completion of the program.

#### Choose your courses with your College Advisor.

Student must be eligible for Reading 99 and Mathematics 98 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation

READING PLACEMENT	MATHEMATICS PLACEMENT
□ FS Reading	□ FS Mathematics
□ Reading 99	□ Mathematics 98

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 1		
•	Technology 409 – Construction Safety (1)	Required Program Core	
•	Technology 448 – Vocational Physical Training (1)	Required Program Core	
•	Technology 429 – Basic Mathematics and Specifications (2)	Required Program Core	
•	Technology 583 – Basic Hand Tools (2)	Required Program Core	
•	Business and Commercial Technology 532 – Basic Computer Technology (1)	Required Program Core	COMPLETION of Basic Certificate in Construction Carpentry
	Phase 2		DO THIS – Meet with advisor to confirm plans DO THIS – Go to both Transfer Center and Career Center to
•	Technology 767 – Blueprint Reading I (2)	Required Program Core	explore both continued education and employment options
•	Technology 581 – Concrete Framing (2)	Required Program Core	
•	Technology 432 – Basic ARC Welding (1)	Required Program Core	
	Phase 3		
•	Technology 401 – Introduction to Labor and Trade Occupations (2)	Required Program Core	
•	Technology 582 – Residential Carpentry (2)	Required Program Core	
		16 CREDIT HOURS	
	MINIMUM TOTAL:	16 CREDIT HOURS	

Please note, the BC requires a minimum of 16 hours, although the sequence above may include additional hours.

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: DA (KK) (M2) (DH) (TR) (HW) (WR)

## **Construction Technology and Drafting**



## PATHWAY: Electrical Line Worker (Overhead)

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in electrical line work. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC) in Electrical Line Worker (Overhead). This does not represent a contract, nor does it guarantee course availability.

The AC program in Electrical Line Worker (Overhead) is structured to meet the current need for overhead electricians/electrical line workers in the electrical power industry.

DEGREE CODE: AC 0766

#### Choose your courses with your College Advisor.

Student must be eligible for Mathematics 98 and Reading 99, and English 101 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT		
□ ESL/FS Writing	□ FS Reading	□ FS Mathematics		
ESL/English 98		□ Mathematics 98		
□ ESL 99 99		•		

ESL/English 100

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 1		
•	Technology 448 – Vocational Physical Training I (1)	Required Program Core	
•	Technology 449 – Professional Development (2)	Required Program Core	
•	English 197 – Communication Skills (3)	Required Program Core	
•	Mathematics 107 – Technical Mathematics (3)	Required Program Core	MORE than halfway through Advanced Certificate
	Phase 2		<ul> <li>DO THIS – Meet with advisor to confirm plans</li> <li>DO THIS – Meet with advisor to confirm plans for after certificate completio</li> </ul>
•	Technology 452 – Basic Electrical Theory (3)	Required Program Core	
•	Technology 453 – Overhead Techniques and Projects I (4)	Required Program Core	
•	Technology 462 – Vocational Physical Training II (1)	Required Program Core	
•	Technology 464 – Power Equipment Operation (5)	Required Program Core	
		19.5 CREDIT HOURS	
٨C	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 3		
•	Technology 459 – Construction Safety and Rescue (3)	Required Program Core	COMPLETION of Advanced Certificate in Electrical Line Worker (Overhead) DO THIS – Apply online for Advanced Certificate
•	Technology 458 – Overhead Techniques and Projects II (4)	Required Program Core	DO THIS - Apply online for Advanced Germicale
•	Technology 463 – Vocational Physical Training III (1)	Required Program Core	Please note, the AC requires a minimum of 30 hours, although the sequence above may include additional hours.
•	Technology 470 – Power Equipment Operation II (2.5)	Required Program Core	
		10.5 CREDIT HOURS	
	MINIMUM TOTAL:	<b>30 CREDIT HOURS</b>	

**Construction Technology and Drafting** 



DEGREE CODE: AC 0749

## PATHWAY: Gas Utility Worker

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in gas utility work. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC) in Gas Utility Worker. This does not represent a contract, nor does it guarantee course availability.

The Gas Utility Worker Program consists of general education courses and core courses that feature specific competencies in the safe construction and operation of natural gas distribution systems. The program takes a student through a series of basic and advanced skill sets designed to enhance on-the-job performance and to quickly bring the student to the level of a full-functioning, skilled worker once employed. Upon completion, students who graduate from this program will be prepared to work as a utility worker in the gas utility industry.

#### Choose your courses with your College Advisor.

Student must be eligible for Mathematics 98, Reading 99, and English 101 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT		
ESL/FS Writing	□ FS Reading	□ FS Mathematics		
ESL/English 98				

□ ESL 99

ESL/English 100

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

>	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Module 1		
	Mathematics 107-3 – Mathematics for Technicians (3)	Required Program Core	
	Technology 434-1 – Introduction to Plumbing (3)	Required Program Core	
	Technology 435-1 – Plumbing Tools and Equipment (2)	Required Program Core	
	Technology 448 – Vocational Physical Training I (1)	Required Program Core	
	Module 2	Required Program Core	EARN 30-hour Construction Industry course completio
	Speech 101 – Fundamentals of Speech Communications (3)	Required Program Core	card, and OSHA construction safety and health 30-hour
	History 113 – United States Labor History (3)	Required Program Core	course completion card from the Department of Labor ALMOST halfway to completion of Advanced Certificate
	Technology 452 – Basic Electrical Theory (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	DO THIS – Meet with advisor to discuss both continued education and employment options
	Module 3	Required Program Core	DO THIS – Meet with advisor to confirm plans for after
	English 107-1 – Report Writing (3)	Required Program Core	graduation
	Construction Management 609 – Construction Safety II (3)	Required Program Core	
	Technology 503 – Gas Utility Training I (6)	Required Program Core	
	Module 4	Required Program Core	
	Technology 504 – Gas Utility Training II (6)	Required Program Core	
	Technology 462 – Vocational Physical Training II (1)	Required Program Core	
		40 CREDIT HOURS	
	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Module 5		
	Technology 505 – Gas Utility Training III (3)	Required Program Core	COMPLETION of Advanced Certificate in Gas Utility W DO THIS – Apply online for advanced certificate
	Technology 449 – Professional Development (2)	Required Program Core	
	Module 6		Please note, the AC requires a minimum of 50 hours, alt the sequence above may include additional hours.
	Technology 506 – Gas Utility Training IV (4)	Required Program Core	and bequeriou above may molade additional mould.
		10 CREDIT HOURS	
	MINIMUM TOTAL:	<b>50 CREDIT HOURS</b>	

CONSTRUCTION TECHNOLOGY AND DRAFTING

## **Construction Technology and Drafting**



## PATHWAY: Mechanical Technology: CAD

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Mechanical Technology: CAD. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Mechanical Technology: CAD.

Completion of the BC in Mechanical Technology: CAD provides the technical instruction and skills development for graduates to find successful employment in the field of drafting, working for mechanical, architectural and construction companies.

DEGREE CODE: BC 0163

#### Choose your courses with your College Advisor.

Communications pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			
ENGLISH PLACEMENT	READING PLACEMENT		
ESL/FS Writing	□ ESL/FS Reading		
ESL/English 98	ESL/Reading 99		
□ ESL 99	ESL/Reading 100		
ESL/English 100	□ Reading		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Engineering 100 – Elements of Engineering (3)	Program Prerequisite	DO THIS – Meet with advisor to confirm plans
		3 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	CAD Technology 170 – CAD Technology II (3)	Required Program Core	DO THIS – Mid-term check-in with advisor
		3 CREDIT HOURS	
BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	CAD Technology 171 – CAD Technology III (3)	Required Program Core	DO THIS – Go to both Transfer Center and Career Center to explore continued education and employment options
		3 CREDIT HOURS	
BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	CAD Technology 172 - CAD Technology IV (3)	Required Program Core	COMPLETION of Basic Certificate in Mechanical Technology: CAD
		3 CREDIT HOURS	
	MINIMUM TOTAL:	12 CREDIT HOURS	
Please note, the BC requires a minimum of 9 hours, although the sequence above may include additional hours.			

**Construction Technology and Drafting** 



DEGREE CODE: BC 0753

## **PATHWAY:** Plumbing and Fire Protection

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in plumbing and fire protection. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Plumbing and Fire Protection. This does not represent a contract, nor does it guarantee course availability.

The Basic Certificate program in Plumbing and Fire Protection program is designed to introduce students to plumbing and sprinkler systems through theory and hands on work. Upon successful completion, graduates will be qualified to work as a plumber's assistant and or fitter assistant.

#### Choose your courses with your College Advisor.

Student must be eligible for Mathematics 98 and Reading 99 to enter the program

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.	
READING PLACEMENT	MATHEMATICS PLACEMENT
□ FS Reading	□ FS Mathematics

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Phase 1		
•	Business and Commercial Technology 532 – Basic Computer Technology (1)	Required Program Core	
•	Technology 432 – Basic Arc Welding (1)	Required Program Core	
•	Technology 434-1 – Introduction to Plumbing (3)	Required Program Core	COMPLETION of Basic Certificate in Plumbing an
•	Technology 437 – Basic Plumbing Related Mathematics (1)	Required Program Core	Fire Protection
	Phase 2		DO THIS – Meet with advisor to confirm plans DO THIS – Go to both Transfer Center and Career
•	Technology 435-1 – Plumbing Tools and Equipment (2)	Required Program Core	Center to explore both continued education and
•	Technology 436 – Plumbing Codes (1)	Required Program Core	employment options
	Phase 3		
•	Technology 438 – Introduction to Fire Protection (3)	Required Program Core	
•	Technology 439 – Home Plumbing System (4)	Required Program Core	
	MINIMUM TOTAL:	16 CREDIT HOURS	

**Culinary Arts and Hospitality** 



# CULINARY ARTS AND HOSPITALITY

## COLLEGE TO CAREERS LOCATION: KENNEDY-KING COLLEGE

With food and board being such comforting and integral parts of our home lives, it can be easy to forget that Culinary and Hospitality is an enormous industry in America, employing tens of millions of people. From the smallest neighborhood restaurant to the most luxurious metropolitan hotel, skilled chefs, caterers, and hospitality personnel are needed to provide guests and diners with exceptional food and lodging. If you have a passion for cooking, baking, or organizing staff and events, Culinary Arts and Hospitality may be a good fit for you.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

	D	AC	BC
Baking and Pastry Arts (pg. 49)	٠	•	•
Culinary Arts (pg. 50)	•	٠	•
Food Sanitation (pg. 52)	0	0	•
Food Sanitation Recertification (pg. 52)	0	0	•
Hospitality Management (pg. 53)	٠	٠	٠

## DEGREE AND CERTIFICATE PATHWAYS OFFERED (a) — THROUGH THE FRENCH PASTRY SCHOOL — (b)

	D	AC	BC
L'art de Gateau (Cake Decorating and Baking Program) (pg. 54)	۰	•	•
L'art de la Pâtisserie (Pastry and Baking Program) (pg. 55)	۰	۰	•

 Students in the Culinary Arts and Hospitality may take classes like the following:

 Culinary 701
 Introduction to Food Service I Speak with your advisor about entering the Culinary Program

 Culinary 721
 Entrée Preparation Speak with your advisor about entering the Culinary Program

 Baking and Pastry 766
 Baking Safety and Sanitation Speak with your advisor about entering the Baking and Pastry Program

 Baking and Pastry 770
 Basic and Classical Cakes Speak with your advisor about entering the Baking and Pastry Program

 D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE

PROGRAMS OF STUDY Culinary Arts and Hospitality



DEGREE CODES: AAS 0365 AC 0366 BC 0367

## **PATHWAY:** Baking and Pastry Arts

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Baking and Pastry Arts. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), an Advanced Certificate (AC) and Associate in Applied Science (AAS) degree in Baking and Pastry Arts. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Baking and Pastry Arts is a sequential learning program taught over four semesters. All semesters include lecture, discussion, demonstration and hands-on production that allow students to practice the techniques of Baking and Pastry production in a commercial bakeshop environment. This program includes production for restaurant and bakeshop sales, offering the student real-world experience in the field.

#### Choose your courses with your College Advisor.

Student must be eligible for English 100, Reading 125, and Mathematics 98 to begin core curriculum classes.

	mathematics pre-degree ASS, ACT or department ch	requirements. Placements air recommendation.	College-level courses that can be taken while in pre-degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: Any Art, Music, <b>OR</b> Theatre class, African-American
ESL/English 98	ESL/Reading 99	FS Mathematics II	Studies 101
□ ESL 99	ESL Reading 100	Mathematics 98	Physical/Life Sciences: Biology 107 <b>OR</b> Environmental Technology 107
ESL/English 100	□ Reading 125	□ Mathematics 99	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Baking and Pastry 765 – Introduction to Baking (3)	Required Program Core	
•	٠	٠	Baking and Pastry 766 – Baking Safety and Sanitation (2)	Required Program Core	COMPLETION of Basic Certificate in Baking and Pastry Arts DO THIS – Meet with advisor to discuss academic goals and
•	٠	٠	Baking and Pastry 767 – Baking Techniques (3)	Required Program Core	plan coursework
•	٠	٠	Baking and Pastry 768 – Pastry Techniques (3)	Required Program Core	<b>DO THIS</b> – Meet with Culinary Department to prepare for entry into Baking and Pastry Program
•	٠	٠	Baking and Pastry 769 – Cookies and Tarts (3)	Required Program Core	
				16 CREDIT HOURS	
D	AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	0	Baking and Pastry 770 – Basic and Classical Cakes (3)	Required Program Core	
•	٠	0	Baking and Pastry 771 – Special Occasion Cakes (3)	Required Program Core	
•	٠	0	Baking and Pastry 772 – Individual Pastries (3)	Required Program Core	ALMOST halfway through Associate in Applied Science degree DO THIS – Meet with advisor to confirm plans
•	٠	0	Baking and Pastry 773 – Confectionery Arts (3)	Required Program Core	
•	۰	0	English 101 – Composition I (3)	Required Program Core	
				15 CREDIT HOURS	
D	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Baking and Pastry 774 – Hearth Breads and Rolls (4)	Required Program Core	
•	٠	0	Baking and Pastry 775 – Specialty Breads and Rolls (4)	Required Program Core	DO THIS – Go to Career Center to explore both continued
•	٠	•	Baking and Pastry 776 – Advanced Baking Principles (3)	Required Program Core	education and employment options
•	٠	•	Biology 107 – Nutrition/Consumer Education (3)	Mathematics/Science	DO THIS – Mid-term check-in with advisor
•	٠	0	Fine Arts/Humanities course (3)	Fine Arts/Humanities (HD)	
				17 CREDIT HOURS	

Culinary Arts and Hospitality

#### (continued from previous page)

D	AC	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
٠	۰	0	Baking and Pastry 777 – Chocolate and Confections (3)	Required Program Core	COMPLETION of Associate in Applied Science degree in Baking		
٠	•	• Baking and Pastry 778 – Contemporary Desserts (6) Required Program Core		Required Program Core	and Pastry Arts		
٠	<ul> <li>Social/Behavioral Sciences course (3)</li> </ul>		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	<ul> <li>COMPLETION of Advanced Certificate in Baking and Pastry Arts</li> <li>DO THIS – Apply online for advanced certificate</li> </ul>		
٠	•	0	Fine Arts/Humanities course (3)	Fine Arts/Humanities	<b>DO THIS</b> – Apply online for degree and graduation		
	15 CREDIT HOURS						
	MINIMUM TOTAL: 61 CREDIT HOURS						
D =	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE						



DEGREE CODES: AAS 0362 AC 0363 BC 0364

## **PATHWAY:** Culinary Arts

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Culinary Arts. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), an Advanced Certificate (AC) and an Associate in Applied Science (AAS) degree in Culinary Arts. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Culinary Arts is a sequential learning program taught over four semesters. All semesters include lecture, discussion, demonstration and hands-on production that allow students to practice the techniques of food production in a commercial food service environment. The curriculum includes additional methods and techniques that will increase the student's repertoire of ethnic and classical menus. In addition, the coursework covers management skills, cost control, budgeting techniques, merchandising, business planning, resume writing and interviewing techniques. General education classes must be completed to satisfy the degree requirements. Students will receive the ServSafe® Sanitation Certification and will be eligible for the City of Chicago and State of Illinois Sanitation certificates upon completion.

The AC program in Culinary Arts is comprised of all courses included in the parent Culinary Arts 362 AAS program with the exception of the general education classes and advanced cooking course. The Advanced Certificate Program frocuses on advanced techniques and offers extensive practice utilizing contemporary and classical menus. Students will receive the ServSafe® Sanitation Certification and will be eligible for the City of Chicago and State of Illinois Sanitation certificates upon completion.

The Basic Certificate in the Culinary Arts curriculum introduces the student to the commercial kitchen environment by covering safety and sanitation procedures, basic mise en place including knife skills and station set-up, proper use and care of equipment, classical cooking terminology, standard cooking methods, stock preparation, and sauce production. This program is designed to give the student the opportunity to investigate and assess Culinary Arts as a possible career goal.

#### Choose your courses with your College Advisor.

Student must be eligible for English 100, Reading 125, and Mathematics 98 to begin core curriculum classes.

	and mathematics pre- sed on COMPASS, ACT c recommendation.		College-level courses that can be taken while in pre-degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	Fine Arts/Humanities: Art 103, Music 121, Theatre 131, Fine Arts 104,	
ESL/English 98	ESL/Reading 99	FS Mathematics II	African-American Studies 101	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Physical/Life Sciences: Biology 107 <b>OR</b> Environmental Technology 107	
ESL/English 100	□ Reading 125	□ Mathematics 99		

(continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		0	English 101 – Composition I (3)	Communications		
•	•	٠	Culinary Arts 701 – Introduction to Food Service I (3)	Required Program Core	COMPLETION of Basic Certificate in Culinary Arts	
•	٠	٠	Culinary Arts 703 – Food Sanitation and Food Safety I (2)	Required Program Core	DO THIS – Meet with advisor to discuss academic g and plan coursework	
•	٠	٠	Culinary Arts 705 – Chef's Training I – Section A (4)	Required Program Core		
•	٠	٠	Culinary Arts 708 – Chef's Training I – Section B (4)	Required Program Core		
				14 CREDIT HOURS		
D	AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	Fine Arts/Humanities course (3)	Humanities (HD)		
•	٠	•	Culinary Arts 706 – Chef's Training II – Section A (4)	Required Program Core	ALMOST halfway through Associate in Applied Science	
•	•	•	Culinary Arts 709 – Chef's Training II – Section B (4)	Required Program Core	degree DO THIS – Meet with an advisor to confirm plans	
•	•	•	Culinary Arts 714 – Nutrition for Chefs (4)	Required Program Core		
				15 CREDIT HOURS		
D	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	Culinary Arts 721 – Entrée Preparation (7)	Required Program Core	COMPLETION of Advanced Certificate in Culinary Arts	
•	•	•	Culinary Arts 707 – Food Service Technology (4)	Required Program Core	<b>DO THIS</b> – Go to Career Center to explore both continued education and employment options	
•	•		Culinary Arts 723 – Food Service Management (5)	Required Program Core	<b>DO THIS</b> – Mid-term check-in with advisor	
				16 CREDIT HOURS		
D	AC	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	Biology 107 – Nutrition/Consumer Education (3)	Mathematics/Science		
•	•		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	<ul> <li>COMPLETION of Associate in Applied Science degree in Culinary Arts</li> </ul>	
•	0	0	Fine Arts/Humanities course (3)	Humanities/Fine Arts	DO THIS – Apply online for advanced certificate	
•	•		Culinary Arts 728 – Advanced Cooking (7)	Required Program Core	DO THIS – Apply online for degree and graduation	
				16 CREDIT HOURS		
			MINIMUM TOTAL:	63 CREDIT HOURS		

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (III) (IIII) (III) (III)

**Culinary Arts and Hospitality** 



## **PATHWAY:** Food Sanitation

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in food sanitation. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Food Sanitation. It does not represent a contract, nor does it guarantee course availability. The Basic Certificate program in Food Sanitation is a partnership between City Colleges of Chicago and the Chicago Department of Public Health. The program offers training in food service sanitation in four languages: English, Spanish, Chinese, and Korean. This program prepares personnel from food establishments for certification and re-certification by the City of Chicago and the State of Illinois and also trains and certifies food vendors participating in outdoor summer festivals.

#### Choose your courses with your College Advisor.

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters. SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT ACTIONS Food Service Administration 222 – Food Service Sanitation (2) Required Program Core COMPLETION of Basic Certificate in Food Sanitation DO THIS – Meet with advisor to discuss academic goals and plan coursework MINIMUM TOTAL: 2 CREDIT HOURS

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 04 (KK ) 04 (TR ) 04



DEGREE CODE: BC 0891

## **PATHWAY:** Food Sanitation Recertification

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in food sanitation. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Food Service Sanitation/Recertification. It does not represent a contract, nor does it guarantee course availability. The Food Service Sanitation/Recertification certificate program offers training in food service sanitation in three languages (English, Spanish, Chinese/Cantonese/Mandarin) and prepares personnel from food establishments for "Certification" and "Recertification" by the City of Chicago and the State of Illinois. This program also trains and certifies food vendors participating in outdoor summer festivals.

**COMPLETION** of Basic Certificate in Food Service Sanitation/Recertification

DO THIS - Meet with advisor to discuss academic goals and plan coursework

#### Choose your courses with your College Advisor.

	SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.				
зС	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		

• Food Service Sanitation/Recertification (1)

1 CREDIT HOUR

Required Program Core

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at:

MINIMUM TOTAL:

PROGRAMS OF STUDY Culinary Arts and Hospitality



DEGREE CODES: AAS 0735 AC 0740 BC 0364

## **PATHWAY:** Hospitality Management

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Hospitality Management. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Culinary Arts and an Advanced Certificate (AC) and an Associate in Applied Science Degree (AAS) in Hospitality Management. It does not represent a contract, nor does it guarantee course availability. Courses may be substituted within the indicated categories (except Communications courses). One course will satisfy the Human Diversity (HD) requirement, and is labeled with an "HD" in the sequence below. The Associate in Applied Science degree in Hospitality Management skills and provides for jobs as guest service agents, front office supervisors, sales managers, event planners, hotel managers, food and beverage managers, assistant food and beverage directors, food and beverage directors of catering.

#### Choose your courses with your College Advisor.

Student must be eligible for English 100, Reading 125, and Mathematics 98 to begin core curriculum classes.

	I mathematics pre-degree ASS, ACT or department cl	requirements. Placements nair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: any Art,	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Music, <b>OR</b> Theatre class, African- American Studies 101		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
□ ESL/English 100	□ Reading 125	□ Mathematics 99	<ul> <li>Physical/Life Sciences:</li> <li>Biology 107 <b>OR</b> Environmental</li> <li>Technology 107</li> </ul>		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
)	٠	٠	Culinary Arts 700 – College Success with Hospitality Perspective (3)	Required Program Core		
•	٠	•	Culinary Arts 701 – Introduction to Food Service I (3)	Required Program Core	COMPLETION of Basic Certificate in Hospitality	
	٠	٠	Culinary Arts 703 – Food Sanitation and Safety I (2)	Required Program Core	Management DO THIS – Meet with an advisor to discuss	
•	٠	٠	Culinary Arts 705 – Chef Training I-Section A (4)	Required Program Core	academic goals and plan coursework	
•	•	٠	Culinary Arts 708 – Chef Training I-Section B (4)	Required Program Core		
				16 CREDIT HOURS		
D	AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	Hospitality 806 – Customer Service Fundamentals (3)	Required Program Core		
•	٠		Culinary Arts 807 – Hospitality Financial Management (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans	
•	•		Culinary Arts 723 – Food Service Management (5)	Required Program Core		
•	٠		Culinary Arts 808 – Restaurant Operations (4)	Required Program Core		
•	۰		English 101 – Composition I (3)	Communications		
				18 CREDIT HOURS		
D	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	Culinary Arts 812 – Hotel and Lodging Operation (4)	Required Program Core	COMPLETION of Advanced Certificate in	
•	٠	0	Culinary Arts 814 – Hospitality Procurement (3)	Required Program Core	Hospitality Management	
•	٠	0	Culinary Arts 810 – Bar and Beverage Management (3)	Required Program Core	DO THIS – Apply online for advanced certificate DO THIS – Go to Career Center to explore both	
•	0	0	Speech 101 – Fundamentals of Speech (3)	Communications	continued education and employment options	
•	0	0	Mathematics 118 – General Education Mathematics (4)	Mathematics/Science	DO THIS – Mid-term check-in with advisor	
				17 CREDIT HOURS		

(continued on next page)

**D** = DEGREE // **AC** = ADVANCED CERTIFICATE // **BC** = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT **CCC.EDU** 

**Culinary Arts and Hospitality** 

#### (continued from previous page)

D	AC	BC SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	٠	0	Culinary Arts 816 – Introduction to Hospitality Marketing Principles (3)	Required Program Core	
•	٠	0	Culinary Arts 860 – Hospitality and Industry Internship (4)	Required Program Core	
•	Culinary Arts 830 – Catering and Event Management (3) <b>OR</b> Culinary 835 – Introduction to Casino Operations Management (3)			Program Elective	COMPLETION of Associate in Applied Science Degree in Hospitality Management DO THIS – Apply online for degree and graduation
٠	<ul> <li>Anthropology 202 – Cultural Anthropology (3)</li> </ul>		Anthropology 202 – Cultural Anthropology (3)	Social / Behavioral Sciences (HD)	
٠	• Humanities 201 – General Course I Humanities (3)		Humanities 201 – General Course I Humanities (3)	Humanities	
				16 CREDIT HOURS	
			MINIMUM TOTAL:	67 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (VX) (DH) (TR) (HV) (WR)



DEGREE CODE: BC 0392

## PATHWAY: L'art de Gâteau (Cake Decorating and Baking Program)

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in cake decorating and baking. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Cake Decorating and Baking (Professional) (L'art du Gâteau). It does not represent a contract, nor does it guarantee course availability. The Basic Certificate program in Professional Cake Decorating and Baking allows students to learn from internationally-renowned master chef instructors in L'art du Gâteau offered by Kennedy-King College's French Pastry School. This all-inclusive, 16-week, full-time certificate program is custom-designed to meet the needs of students who want to specialize in the prestigious art of cake baking and decorating. This unique hands-on program focuses on all aspects involving the creation of wedding, celebration, and specialty cakes. Personal attention from chef mentors is given every day in the kitchen, providing a comfortable, yet thorough training.

#### Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Baking and Pastry 779 – Safety and Sanitation (1)	Required Program Core	
٠	Baking and Pastry 780 – Baking, Pastry, and Technology (4)	Required Program Core	COMPLETION of Basic Certificate in L'art du Gâteau
٠	Baking and Pastry 781 – Cake Baking and Construction (5)	Required Program Core	(Cake Decorating and Baking Program) DO THIS – Meet with an advisor to discuss academic
٠	Baking and Pastry 782 – Cake Decorating Techniques (5)	Required Program Core	goals and plan coursework
٠	Baking and Pastry 783 – Cake Business Planning (1)	Required Program Core	
	MINIMUM TOTAL:	16 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (S) (MX) (DH) (TB) (HW) (WB



PROGRAMS OF STUDY Culinary Arts and Hospitality

DEGREE CODE: BC 0746

### **PATHWAY:** L'art de la Pâtisserie (Pastry and Baking Program) Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pastry and baking. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Cake Decorating and Baking (L'art de la Pâtisserie). It does not represent a contract, nor does it guarantee course availability. The Basic Certificate program in Professional Pastry and Baking through Kennedy-King College's French Pastry School offers excellent innovative and effective pastry, baking, and confectionery arts education in the L'art de la Pâtisserie inclusive 24-week certificate program. Instructed by some of the best pastry artisans in the world, students receive intensive hands-on practice, using the finest ingredients and equipment, in order to be optimally prepared to pursue a career in pastry. The Basic Certificate Program offers the rare opportunity to learn the art of pastry in an intimate setting, where students are personally mentored by masters. Students' skills are finely honed through hands-on practice and repeated exposure to the best pastry techniques, tools, and ingredients.

#### Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Baking and Pastry 707 – Food Service Technology (4)	Required Program Core	
•	Baking and Pastry 712 – Baking Theory and Problems (5)	Required Program Core	COMPLETION of Pagis Cartificate in Light do la
•	Baking and Pastry 754 – Candy and Confectionery (2)	Required Program Core	COMPLETION of Basic Certificate in L'art de la Pâtisserie (Pastry and Baking Program)
•	Baking and Pastry 758 – Plated Desserts (4)	Required Program Core	DO THIS – Meet with an advisor to discuss academic goals and plan coursework
•	Baking and Pastry 761 – Chocolate and Sugar (5)	Required Program Core	goals and plan coursework
٠	Baking and Pastry 762 – French Cakes and Pastries (4)	Required Program Core	
	MINIMUM	M TOTAL: 16 CREDIT HOURS	

Offered at the French Pastry School

## PROGRAMS OF STUDY Education

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# EDUCATION

## COLLEGE TO CAREERS LOCATION: HARRY S TRUMAN COLLEGE

Calling all active listeners, idealists, caregivers, mediators, those who are happiest when they are helping someone else, those who feel most fulfilled when they are improving the lives of those around them, this is the focus area for you. The education sector covers all aspects of teaching, beginning from the very youngest students, reaching across subjects like mathematics, science and languages. Do you remember your favorite teacher? The one you inspired to dream big and then supported you to pursue those dreams? If you have the desire to inspire others, you should definitely consider the field of Education.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

	D	AC	BC
Child Development: Bilingual Teacher Aide (pg. 201)	•	0	٠
Child Development: Early Childhood Education (pg. 57)	•	0	٠
Child Development: Pre-school Education (pg. 58)	•	٠	٠
Child Development: Pre-school Education/Infant Toddler (pg. 202)	0	•	۰
Child Development: School-Age Childcare (pg. 60)	•	0	0
Elementary Education (pg. 61, 202, 203)	•	٠	0
Family Childcare Business (pg. 63)	0	0	٠
French Teacher (pg. 63)	٠	0	0
High School Biology Teacher (pg. 65)	٠	0	0
High School Chemistry Teacher (pg. 66)	٠	0	•
High School Physics Teacher (pg. 68)	٠	0	0
K-12 Physical Education Teacher (pg. 69)	•	0	•
K-12 Special Education Teacher (pg. 71)	•	0	•
Middle School Science Teacher (pg. 72)	٠	0	0
Middle/High School English Teacher (pg. 74)	•	0	•
Middle/High School Mathematics Teacher (pg. 75)	•	0	•
Middle/High School Social Science Teacher (pg. 77)	•	•	۰
Spanish Teacher (pg. 78)	•	0	۰
Students in Education may take classes like the following:			

English 101	Composition I May require taking English readiness courses					
Mathematics 118 <b>OR</b> 125	General Education Mathematics <b>OR</b> Introduction to Statistics <i>College level mathematics eligibility required</i>					
Education 101	Introduction to Education					
Psychology 201	General Psychology					
D - DEGREE // AC - ADVANCED CERTIFICATE // BC - BASIC CERTIFICATE						



AA 0210 BC 0277

## PATHWAY: Child Development: Early Childhood Education

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Are you a "kid person?" Or, are you the kid who used to take on the role of teacher when you played school with your friends? If you answered yes, a pathway in child development might be the right choice for you. Students in child development learn how to teach children, who may range in age from infants to third graders. You'll learn about how a child's emotions, social skills and intelligence develop so that you can plan and design services for kids.

This is an **example course sequence** for students interested in pursuing child development. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree and a Basic Certificate (BC) in Child Development: Early Childhood Education. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken -degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	□ Child Development 107
ESL/English 100	□ Reading 125	□ Mathematics 99		Child Development 120
				□ Child Development 149

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	BC	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	•	English 101 – Composition I (3)	Communications	
•	0	٠	Mathematics 118 – General Education Mathematics $\boldsymbol{OR}$ above (4)	Mathematics	
•	0	Social/Behavioral Sciences course (3)		Social/Behavioral Sciences (HD)	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
٠	0	٠	Humanities/Fine Arts course (3)	Humanities/Fine Arts	
•	٠	0	Child Development 107 – Health, Safety and Nutrition (3)	Required Program Core	
				16 CREDIT HOURS	
D	BC	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	0	•	Speech 101 – Fundamentals of Speech Communication (3)	Communications	
•	0	٠	Physical Sciences course (4)	Physical Sciences	DO THIS - Mid-term check-in with advisor
•	0	٠	Humanities course (3)	Humanities	DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year
٠	0	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	schools for potential transfer
٠	٠	0	Child Development 120 – Introduction to Group Care (3)	Required Program Core	
				16 CREDIT HOURS	

Education

#### (continued from previous page)

D	BC	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	٠	English 102 – Composition II (3)	Communications	
•	•	•	Life Sciences course (4)	Life Sciences	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year
•	•	•	Humanities/Fine Arts course (3)	Humanities/Fine Arts	funding outlets such as scholarships and aid
•	0	٠	World Language course (4)	Elective	DO THIS – Prepare documentation for college application
•	٠	٠	Child Development 149 – Creative Activities for Young Children (3)	Required Prorgam Core	
				17 CREDIT HOURS	
D	BC	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	COMPLETION of Associate in Arts degree in Child
•	0	۰	World Language course (4)	Elective	Development: Early Childhood Education
•	٠	۰	Child Development 101 $-$ Human Growth and Development I (4)	Required Program Core	COMPLETION of Basic Certificate in Child Development: Early Childhood Education
•	0	0	Program Elective (3)	Program Elective	DO THIS – Apply to four-year schools of your choice DO THIS – Apply online for degree and graduation
				14 CREDIT HOURS	
			MINIMUM TOTAL:	63 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 📴 (KK) (M2) (M3) (M3) (M3) (M3)



DEGREE CODES: AAS 0278 AC 0282 BC 0277

## PATHWAY: Child Development: Pre-school Education

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Child Development: Pre-school Education. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), an Advanced Certificate (AC) and an Associate in Applied Science (AAS) Degree in Child Development: Pre-school Education. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Pre-school Education provides child development theory and skills for the student who intends to work immediately in a pre-school program as a teacher or teacher assistant in public and private preschools, child care centers, or nursery schools as well as prepare students to work as teacher aides and activities supervisors.

#### Choose your courses with your College Advisor.

	l mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.			
ENGLISH PLACEMENT READING PLACEMENT MATHEMATICS PLACEMENT		MATHEMATICS PLACEMENT	ELECTIVE COURSES			
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	College Success			
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Child Development 107			
□ ESL 99	ESL Reading 100	□ Mathematics 98	Child Development 120			
ESL/English 100	□ Reading 125	□ Mathematics 99	Child Development 149			
(continued on port page)						

## **PROGRAMS OF STUDY Education**

#### (continued from previous page)

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters

_	1			
AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Child Development 107 – Health, Safety and Nutrition (3)	Required Program Core	
•	•	Child Development 120 – Introduction to Early Childhood Education Group Care (3)	Required Program Core	DO THIS – Meet with advisor to discuss
•	0	English 101 – Composition (3)	Communications	academic goals and plan coursework
•	0	Mathematics 118 or Above (4)	Mathematics/Science	
			13 CREDIT HOURS	
AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Child Development 101 – Human Growth and Development I (4)	Required Program Core	COMPLETION of Basic Certificate in Chil
•	0	Child Development 149 – Creative Activities for Young Children (3)	Development – Pre-school Education	
•	0	Child Development 262 - Child, Family, and Community Relations (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	0	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	μαισ
			13 CREDIT HOURS	
AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	Child Development 109 – Development of the Exceptional Child (3)	Required Program Core	
•	0	Child Development 143 – Science and Mathematics for Young Children (3)	Required Program Core	<b>DO THIS</b> – Go to Career Center to explore both continued education and employment
•	0	Child Development 201 – Observation, Assessment, and Documentation to Support Young Children and Families (3)	Required Program Core	options DO THIS – Mid-term check-in with adviso
•	0	Humanities course (3)	Humanities (HD)	
			12 CREDIT HOURS	
) AC	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	Child Development 258 – Principles and Practices of Pre-school Education (4)	Required Program Core	
•	0	Program Elective (3)	Program Elective	DO THIS – Mid-term check-in with adviso
•	0	Program Elective (3)	Program Elective	
•	0	Mathematics/Science course (3-5)	Mathematics/Science	
			13-15 CREDIT HOURS	
) AC	BC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	Child Development 259 – Practicum in Pre-school (6)	Required Program Core	COMPLETION of Advanced Certificate in
•	0	Elective (3)	Elective	Child Development: Pre-school Education
•	0	Elective (3)	Elective	Science in Child Development: Pre-school Education DO THIS – Apply online for advanced certificate DO THIS – Apply online for degree and graduation



FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU

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Education



DEGREE CODE: AAS 0275

## PATHWAY: Child Development: School-Age Childcare

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Child Development: School-Age Childcare. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Child Development: School-Age Childcare. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Child Development: School-Age Childcare provides graduates who have met the educational requirements to qualify as group workers and child care providers of school age children. The settings for which this focus is appropriate are private child-care centers and before-and after-school programs. Graduates of the program will also qualify to be assistant teachers or education support staff in public elementary schools.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	□ Child Development 107	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	□ Social Service 212	
□ ESL/English 100	□ Reading 125	□ Mathematics 99	Mathematics/Science: Biology 107, Environmental Technology 107		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Child Development 107 – Health, Safety and Nutrition (3)	Required Program Core	
•	Social Service 212 – Introduction to Group Processes (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and
•	English 101 – Composition (3)	Communications	plan coursework
٠	Mathematics 118 – General Education Mathematics $\boldsymbol{OR}$ above (4)	Mathematics/Science	
		13 CREDIT HOURS	
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Child Development 101 – Human Growth and Development I (4)	Required Program Core	
٠	Child Development 262 - Child, Family, and Community Relations (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Child Development 149 - Creative Activities for Young Children (3)	Program Elective	
•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	
		13 CREDIT HOURS	
D	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Child Development 144 – School Age Activity Programming (3)	Required Program Core	
•	Child Development 201 – Observation, Assessment, and Documentation to Support Young Children and Families (3)	Required Program Core	DO THIS – Mid-term check-in with advisor DO THIS – Go to Career Center to explore both continued
٠	Child Development 109 – Development of the Exceptional Child (3)	Program Elective	education and employment options
٠	Humanities/Fine Arts course (3)	Humanities/Fine Arts	
		12 CREDIT HOURS	

#### (continued from previous page)

D	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Child Development 102 – Human Growth and Development (3)	Required Program Core	
•	Child Development 205 – Development of Exceptional Child (3)	Required Program Core	DO THIS - Mid-term check-in with advisor
٠	Child Development 268 – Principles and Practice of School-Age Programs (4)	Required Program Core	DO THIS – MId-term check-in with advisor
٠	Mathematics/Science course (3-5)	Mathematics/Science	
		13-15 CREDIT HOURS	
D	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
D	SEMESTER 5 Child Development 269 – Practicum in School-Age Childcare (6)	CATEGORY Required Program Core	
D •			COMPLETION of Associate in Applied Science in Child Development: School-Age Childcare
D • •	Child Development 269 – Practicum in School-Age Childcare (6)	Required Program Core	COMPLETION of Associate in Applied Science in Child
D • •	Child Development 269 – Practicum in School-Age Childcare (6) Program Elective (3)	Required Program Core Program Elective	COMPLETION of Associate in Applied Science in Child Development: School-Age Childcare

**PROGRAM ELECTIVES** 

Students should meet with a College Advisor for selection of elective courses.

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at:



DEGREE CODE: AA 0210

## **PATHWAY:** Elementary Education

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

Humorist Mark Twain once said, "It is noble to teach oneself, but still nobler to teach others—and less trouble." All jokes aside, if you believe giving children a solid education prepares our whole society to better meet the future, elementary education may be for you. Courses in this major will prepare you to teach all elementary subjects from reading to arithmetic in grades from kindergarten through eighth grade. You will also gain skills in serving diverse populations and strategies for motivating students to succeed. If you like kids, and believe that being a positive influence early in a child's life can make all the difference, earn your associates degree in elementary education. You can transfer to a four-year college as a junior, earn your bachelor's degree and become an elementary or middle school teacher. Teaching is the art of assisted discovery—make this your pathway.

This is an **example course sequence** for students interested in pursuing Elementary Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES		
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	□ College Success		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages		
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101			
ESL/English 100	□ Reading 125	□ Mathematics 99				

## **PROGRAMS OF STUDY** Education

#### (continued from previous page)

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 101 – Composition I (3)	Communications		
•	Mathematics 121 – Mathematics for Elementary Teachers I (4)	Mathematics/Science	COMPLETION of general education classes DO THIS – Meet with advisor to discuss	
•	Fine Arts course (3)	Humanities/Fine Arts		
•	Education 101 – Introduction to Education (3)	Elective	academic goals and plan coursework	
•	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences		
		16 CREDIT HOURS		
GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 102 – Composition II (3)	Communications		
•	Mathematics 122 – Mathematics for Elementary Teachers II (4)	Elective	ALMOST halfway through Associate in Arts	
•	Literature 130 – Children's Literature (3)	Humanities/Fine Arts	degree	
•	History 112 – History of the American People (3)	Social/Behavioral Sciences	DO THIS – Meet with advisor to confirm plans	
•	Education 102 – Using Technology in the Classroom (3)	Elective		
		16 CREDIT HOURS		
GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
		0iti		
•	Speech 101 – Fundamentals of Speech (3)	Communications		
	Speech 101 – Fundamentals of Speech (3)         Mathematics 125 – Introductory Statistics (4)	Elective	DO THIS – Go to Career Center to explore bot	
			continued education and employment options	
•	Mathematics 125 – Introductory Statistics (4)	Elective		
•	Mathematics 125 – Introductory Statistics (4) Education 103 – Students with Disabilities (3)	Elective Elective	continued education and employment options	
•	Mathematics 125 – Introductory Statistics (4)         Education 103 – Students with Disabilities (3)         Political Science course (3) <b>OR</b> Sociology course (3)	Elective Elective Social/Behavioral Sciences	continued education and employment options	
•	Mathematics 125 – Introductory Statistics (4)         Education 103 – Students with Disabilities (3)         Political Science course (3) <b>OR</b> Sociology course (3)	Elective Elective Social/Behavioral Sciences Mathematics/Science	continued education and employment options	
	Mathematics 125 – Introductory Statistics (4) Education 103 – Students with Disabilities (3) Political Science course (3) <b>OR</b> Sociology course (3) Physical Sciences 107 – Current Public Issues (3)	Elective Elective Social/Behavioral Sciences Mathematics/Science 16 CREDIT HOURS	Continued education and employment options DO THIS – Mid-term check-in with advisor ACHIEVEMENTS & NEXT ACTIONS	
• • • • • • • • • • • • • • • • • • •	Mathematics 125 – Introductory Statistics (4) Education 103 – Students with Disabilities (3) Political Science course (3) <b>OR</b> Sociology course (3) Physical Sciences 107 – Current Public Issues (3) SEMESTER 4	Elective Elective Social/Behavioral Sciences Mathematics/Science 16 CREDIT HOURS CATEGORY	Continued education and employment options DO THIS – Mid-term check-in with advisor	
• • • • • • • • • • • • • • • • • • •	Mathematics 125 – Introductory Statistics (4)         Education 103 – Students with Disabilities (3)         Political Science course (3) <b>OR</b> Sociology course (3)         Physical Sciences 107 – Current Public Issues (3)         SEMESTER 4         Education 208 – School Leadership and Support Professionals (3)	Elective Elective Social/Behavioral Sciences Mathematics/Science 16 CREDIT HOURS CATEGORY Elective	COMPLETION of Associate in Arts degree in Elementary Education DO THIS – Apply online for degree and	
GECC	Mathematics 125 – Introductory Statistics (4)         Education 103 – Students with Disabilities (3)         Political Science course (3) <b>OR</b> Sociology course (3)         Physical Sciences 107 – Current Public Issues (3) <b>SEMESTER 4</b> Education 208 – School Leadership and Support Professionals (3)         Biology 114 – General Education Biology <b>OR</b> Biology 115 – Human Biology (4)	Elective Elective Social/Behavioral Sciences Mathematics/Science 16 CREDIT HOURS CATEGORY Elective Mathematics/Science	COMPLETION of Associate in Arts degree in Elementary Education	
GECC	Mathematics 125 – Introductory Statistics (4)         Education 103 – Students with Disabilities (3)         Political Science course (3) <b>OR</b> Sociology course (3)         Physical Sciences 107 – Current Public Issues (3)         SEMESTER 4         Education 208 – School Leadership and Support Professionals (3)         Biology 114 – General Education Biology <b>OR</b> Biology 115 – Human Biology (4)         Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Elective Elective Social/Behavioral Sciences Mathematics/Science 16 CREDIT HOURS CATEGORY Elective Mathematics/Science Humanities (HD)	DO THIS – Mid-term check-in with advisor         ACHIEVEMENTS & NEXT ACTIONS         COMPLETION of Associate in Arts degree in Elementary Education         DO THIS – Apply online for degree and	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 💿 ඟ 😡 🕞 🐨 🐨



## **PATHWAY:** Family Childcare Business

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Family Childcare Business certificate. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability. The Family Childcare Business certificate program trains, advises, and prepares potential providers of the process involved in opening a quality home child carecenter. State licensing requirements, programming, staffing, health/nutrition, and child safety are covered.

DEGREE CODE BC 0831

#### Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

вС	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Home Economics 104 – Developing Your Family Childcare Business (1.5)	Required Program Core	<b>COMPLETION</b> of Basic Certificate in Family Childcare Business <b>DO THIS</b> – Meet with advisor to discuss academic goals and plan coursework
	MINIMUM TOTAL:	1.5 CREDIT HOURS	
D =	= DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC	CERTIFICATE	Programs offered at: 💿 ඟ 😡 👓 🐨 👐



DEGREE CODE: AA 0210

## **PATHWAY:** French Teacher

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

Many people who love language become teachers in order to share this love with others. If you have a passion for French, you might consider sharing it by following the French Teacher Education Pathway. You'll learn how to teach the French language to students of various ages. In addition to taking classes in French language, literature, and culture, you'll study education topics, such as foreign language teaching methods and educational psychology. Budding French teachers who plan to teach in public schools have to attain at least a bachelor's degree, generally in education or French, and complete a teacher education program, which includes a student teaching experience. Get a head start now by earning your associate degree from City Colleges of Chicago, transfer as a junior to a four-year college, and earn your bachelor's degree.

This is an **example course sequence** for students interested in pursuing French Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level program of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES		
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	□ College Success		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages		
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101			
ESL/English 100	□ Reading 125	□ Mathematics 99				

## Education

#### (continued from previous page)

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

All plans can be modified to in the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	English 101 – Composition I (3)	Communications		
•	•	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	COMPLETION of general education classes	
•	٠	Fine Arts course (3)	Humanities/Fine Arts	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
•	0	Education 101 – Introduction to Education (3)	Elective		
•	٠	French course (4)	Elective		
			17 CREDIT HOURS		
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Education 102 – Using Technology in the Classroom (3)	Elective		
•	٠	English 102 – Composition II (3)	Communications		
•	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	ALMOST halfway through Associate in Arts degree DO THIS – Meet with advisor to confirm plans	
•	۰	French course (4)	Elective		
•	٠	Humanities 205 – World Literature I (3)	Humanities/Fine Arts		
			16 CREDIT HOURS		
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Speech 101 – Fundamentals of Speech (3)	Communications		
	٠	Anthropology 202 – Cultural Anthropology (3)	Social/Behavioral Sciences	DO THIS – Go to Career Center to explore both continued	
	0	French course (4)	Elective	education and employment options	
	٠	Biology 114 – General Education Biology (4) <b>OR</b> Biology 115 – Human Biology (4)	Mathematics/Science		
			14 CREDIT HOURS		
<b>)</b>	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
	٠	Education 103 – Students with Disabilities in School (3)	Elective		
	٠	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities/Fine Arts	COMPLETION of Associate in Arts degree in French	
	٠	Physical Sciences 107 – Current Public Issues in Physical Sciences (3)	Mathematics/Science	Teacher	
	٠	French course (4)	Elective	DO THIS – Apply online for degree and graduation	
	٠	History 142 – History of World Civilization from 1500 (3)	Social/Behavioral Sciences		
-					
			16 CREDIT HOURS		

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 💿 ඟ 🚾 💬 🖙 🐨 🐨



AS 0211

## PATHWAY: High School Biology Teacher

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you love science and want to inspire others to be independent thinkers, you might enjoy a career as a science teacher. The High School Biology Teacher pathway begins your preparation to teach biology to high school students. You'll find yourself using computers to do research and interactive science lessons, and participating in activities that range from lab experiments to nature field trips. Most aspiring science teachers will need a bachelor's degree and from an IL teacher certification program. Get started now by earning your associate degree from City Colleges, transfer to a four-year teacher certification program as a junior, and start a career as the mad science teacher in a high school.

This is an **example course sequence** for students interested in pursuing Biology Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES		
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	College Success		
ESL/English 98	ESL/Reading 99	FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages		
□ ESL 99	ESL Reading 100	Mathematics 98	Studies 101			
ESL/English 100	□ Reading 125	□ Mathematics 99				

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 101 – Composition I (3)	Communications	
٠	•	Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
٠	•	Biology 121 – Biology 1 (5)	Mathematics/Science	
٠	0	Education 101 – Introduction to Education (3)	Elective	
			15 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 102 – Composition II (3)	Communications	
٠	٠	Biology 122 – Biology II (5)	Required Program Core	DO THIS – Mid-term check-in with advisor
٠	٠	Mathematics 143 – Precalculus (6)	Required Program Core	<ul> <li>DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year schools for potential transfer</li> </ul>
•	٠	Education 102 – Using Technology in the Classroom (3)	Elective	
			17 CREDIT HOURS	
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	History 112 – History of American People from 1865 (3)	Social/Behavioral Sciences	
•	٠	Philosophy 107 – Ethics (3)	Humanities/Fine Arts	DO THIS – Mid-term check-in with advisor
•	٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid
•	٠	Chemistry 201 – General Chemistry (5)	Mathematics/Science	DO THIS – Prepare documentation for college application
•	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
			17 CREDIT HOURS	

#### (continued from previous page)

D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)	
•	٠	Political Science course (3)	Social/Behavioral Sciences	COMPLETION of Associate in Science degree in High School
•	0	Education 103 – Students with Disabilitites in School (3)	Elective	Biology Teacher DO THIS – Apply to four-year schools of your choice
•	٠	Chemistry 203 – General Chemistry II (5)	Required Program Core	DO THIS – Apply online for degree and graduation
•	٠	Fine Arts course (3)	Humanities/Fine Arts	
			17 CREDIT HOURS	
		MINIMUM TOTAL:	66 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (...)



DEGREE CODE: AS 0211

ocus Area: Education

## **PATHWAY: High School Chemistry Teacher**

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you love science and want to inspire others to be independent thinkers, you might enjoy a career as a science teacher. The High School Chemistry Teacher pathway begins your preparation to teach chemistry to high school students. You'll find yourself using computers to do research and interactive science lessons, and participating in activities that range from lab experiments to nature field trips. Most aspiring science teachers will need a bachelor's degree and from an IL teacher certification program. Get started now by earning your associate degree from City Colleges, transfer to a four-year teacher certification program as a junior, and start a career as the mad science teacher in a high school.

This is an **example course sequence** for students interested in pursuing Chemistry Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES		
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages		
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101			
ESL/English 100	□ Reading 125	□ Mathematics 99				

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	English 101 – Composition I (3)	Communications	
•	٠	Mathematics 143 – Precalculus (6)	Mathematics/Science	DO THIS – Meet with advisor to confirm plans
•	٠	Chemistry 201 – General Chemistry 1 (5) Prerequisite: Chemistry 121 <b>0R</b> High School Chemistry	Mathematics/Science	DO THIS – Begin research on four-year schools
•	0	Education 101 – Introduction to Education (3)	Elective	
			17 CREDIT HOURS	

## **PROGRAMS OF STUDY** Education

#### (continued from previous page)

GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	English 102 – Composition II (3)	Communications	
۰	Education 102 – Using Technology in the Classroom (3)	Elective	DO THIS – Mid-term check-in with advisor
٠	Political Science course (3)	Social/Behavioral Sciences	DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year
٠	Biology course (3)	Mathematics/Science	schools for potential transfer
٠	Mathematics 207 – Calculus and Analytic Geometry I (5)	Required Program Core	
		17 CREDIT HOURS	
GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	History 112 – History of American People from 1865 (3)	Social/Behavioral Sciences	
٠	Philosophy 107 – Ethics (3)	Humanities/Fine Arts	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year fund
٠	Fine Arts course (3)	Humanities/Fine Arts	outlets such as scholarships and aid
٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS – Prepare documentation for college application
٠	Chemistry 203 – General Chemistry II (5)	Required Program Core	
		17 CREDIT HOURS	
GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)	
٠	Education 103 – Students with Disabilitites in School (3)	Elective	COMPLETION of Associate in Science degree in School Chemistry Teacher
•	Chemistry 205 – Organic Chemistry I (6) <b>OR</b> Physics 221 – Mechanics, Waves and Heat (5)	Required Program Core	DO THIS – Apply to four-year schools of your choi DO THIS – Apply to four-year schools of your choi DO THIS – Apply online for degree and graduation
٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
		14-15 CREDIT HOURS	
	MINIMUM TOTAL:	65 CREDIT HOURS	

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Education



AS 0211

## **PATHWAY:** High School Physics Teacher

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

If you love science and want to inspire others to be independent thinkers, you might enjoy a career as a science teacher. The High School Physics Teacher pathway begins your preparation to teach physics to high school students. You'll find yourself using computers to do research and interactive science lessons, and participating in activities that range from lab experiments to nature field trips. Most aspiring science teachers will need a bachelor's degree and from an IL teacher certification program. Get started now by earning your associate degree from City Colleges, transfer to a four-year teacher certification program as a junior, and start a career as the mad science teacher in a high school.

This is an **example course sequence** for students interested in pursuing Physics Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	FS Mathematics I	Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American Studies 101	World Languages
□ ESL 99	ESL Reading 100	□ Mathematics 98		
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D GI	ECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 101 – Composition I (3)	Communications	
•	•	Mathematics 143 – Precalculus (6)	Mathematics/Science	
•	•	Biology course (3)	Mathematics/Science	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
•	•	History 112 – History of American People from 1865 (3)	Social/Behavioral Sciences	
•	0	Education 101 – Introduction to Education (3)	Elective	
			18 CREDIT HOURS	
D GI	ECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 102 – Composition II (3)	Communications	
•	0	Education 102 – Using Technology in the Classroom (3)	Elective	DO THIS – Mid-term check-in with advisor
•	•	Physics 220 – Physics Calculations and Practice (2)	Required Program Core	DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year
•	•	Physics 231 – General Physics 1: Mechanics and Wave Motion (4)	Mathematics/Science	schools for potential transfer
•	•	Political Science course (3)	Social/Behavioral Sciences	
			15 CREDIT HOURS	
D GI	ECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Philosophy 107 – Ethics (3)	Humanities/Fine Arts	
	•	Physics 232 – General Physics II: Electricity and Magnetism (4)	Required Program Core	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year funding
•	•	Speech 101 – Fundamentals of Speech (3)	Communications	outlets such as scholarships and aid
•	•	Mathematics 207 – Calculus and Analytic Geometry I (5)	Required Program Core	DO THIS – Prepare documentation for college application
•	•	Elective course (1-3)	Required Program Core	
			16-18 CREDIT HOURS	

#### (continued from previous page)

D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	٠	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)	
٠	0	Education 103 – Students with Disabilitites in School (3)	Elective	COMPLETION of Associate in Science degree in High
•	٠	Physics 233 – General Physics III: Heat, Light and Modern Physics (4)	Required Program Core	School Physics Teacher DO THIS – Apply to four-year schools of your choice
•	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	DO THIS – Apply online for degree and graduation
٠	٠	Fine Arts course (3)	Humanities/Fine Arts	
			16 CREDIT HOURS	
		MINIMUM TOTAL:	65 CREDIT HOURS	

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DEGREE CODE: AA 0210

## **PATHWAY:** K-12 Physical Education Teacher

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

What do all of the world class World Cup (and other) athletes have in common? They all have gifted teachers and coaches behind them, people who have helped them reach the heights of strength, grace, and speed. But coaches and physical education teachers don't just groom future sports celebrities. By working in schools and youth programs, they help all young people have fun while getting fit. Do you want to help kids become confident, coordinated, and team-spirited? If so, consider our physical education teacher pathway. This pathway is designed so you can transfer to a four-year university as a junior, get your bachelor's degree, and start a career as a physical education teacher.

This is an **example course sequence** for students interested in pursuing Physical Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				College-level courses that can be taken while in pre-degree courses.		
ENGLISH	I PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
ESL/FS	S Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	□ College Success	
🗆 ESL/Er	nglish 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages	
🗆 ESL 99	)	ESL Reading 100	□ Mathematics 98	Studies 101		
🗆 ESL/Er	nglish 100	□ Reading 125	□ Mathematics 99			

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
٠	٠	English 101 – Composition I (3)	Communications		
٠	٠	Mathematics 118 – General Education Mathematics (4)	Mathematics/Science	DO THIS – Meet with advisor to	
٠	٠	Fine Arts course (3)	Humanities/Fine Arts	discuss academic goals and plan	
٠	•	Education 101 – Introducation to Education (3)	Elective	coursework	
٠	•	Health 250 – Health Education (3)	Elective		
			16 CREDIT HOURS		

### (continued on next page)

FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU

#### (continued from previous page)

GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTION	
٠	English 102 – Composition II (3)	Communications		
٠	Biology 116 – Anatomy and Physiology (4)	Mathematics/Science	ALLACOT belfum through Associate in	
٠	Psychology 201 – General Psychology (3)	Social/Behavioral	ALMOST halfway through Associate ir Arts Degree	
0	Education 102 – Using Technology in the Classroom (3)	Elective	DO THIS – Meet with advisor to confirm plans	
٠	Physical Education 200 – Introduction to Physical Education (2)	Elective	commu plans	
٠	Elective course (2-3)	Elective	-	
		17-18 CREDIT HOURS		
GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTION	
•	History 112 – History of the American People (3)	Social/Behavioral		
٠	Education 103 – Students with Disabilities in School (3)	Elective	DO THIS – Mid-term check-in with advisor	
0	Physical Education course(s) (3)	Elective	DO THIS – Go to Career Center to	
٠	Humanities 145 – Introducation to Diversity/Ethnic Studies (3)	Humanities (HD)	explore both continued education an employment options	
0	Biology 107 – Nutrition-Consumer Education (3)	Elective		
		15 CREDIT HOURS		
GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTION	
•	Speech 101 – Fundamentals of Speech (3)	Communications		
٠	Political Science course (3)	Social/Behavioral	COMPLETION of Associate in Arts degree in K-12 Physical Education	
٠	Philosophy 107 – Ethics (3)	Humanities/Fine Arts	Teacher	
٠	Physical Sciences 107 – Current Public Issues in Physical Sciences (3)	Mathematics/Science	DO THIS – Apply online for degree ar graduation	
0	Physical Education course(s) OR Education 208 – School Leadership and Support Professionals (3)	Elective	9.4664401	
		15 CREDIT HOURS		
	MINIMUM TOTAL:	63 CREDIT HOURS		



AA 0210

## PATHWAY: K-12 Special Education Teacher

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Interested in helping to unlock the mysteries behind misunderstood minds? Do you have great expectations for all children? The special education classroom needs you! You'll need to be a team-player, someone who celebrates difference and an assertive advocate, since part of your role will be to make sure your students get the services they need. Follow the Special Education Teacher pathway and you will be on your way to be prepared to teach students with special learning needs or disabilities. If you plan to teach in public schools you will need to attain at least a bachelor's degree, generally in special education, and complete a teacher education program, which includes a student teaching experience. Get started right now by earning your associate degree from City Colleges of Chicago, transfer as a junior to a four-year college, earn your bachelor's degree and start a career as a life-changing teacher.

This is an **example course sequence** for students interested in pursuing Special Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	FS Mathematics I	□ Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101		
ESL/English 100	Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	English 101 – Composition I (3)	Communications		
•	•	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss acaden goals and plan coursework DO THIS – Begin research on four-year schools	
•	٠	Fine Arts course (3)	Humanities/Fine Arts		
•	٠	Education 101 – Introduction to Education (3)	Elective		
•	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences		
			16 CREDIT HOURS		
D					
ין ט	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	GECC	SEMESTER 2 English 102 – Composition II (3)	CATEGORY Communications	ACHIEVEMENTS & NEXT ACTIONS	
•	GECC •			ACHIEVEMENTS & NEXT ACTIONS DO THIS – Mid-term check-in with advisor	
•	GECC • •	English 102 – Composition II (3)	Communications	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to	
• • •	GECC • • •	English 102 – Composition II (3) Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Communications Humanities (HD)	DO THIS – Mid-term check-in with advisor	
• • • • •	GECC	English 102 – Composition II (3) Humanities 145 – Introduction to Diversity/Ethnic Studies (3) Psychology 207 – Child Psychology (3)	Communications Humanities (HD) Social/Behavioral Sciences	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year	

#### (continued from previous page)

DG	ECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Biology 114 – General Education Biology (4) OR Biology 115 – Human Biology (4)	Mathematics/Science		
•	0	Education 103 – Students with Disabilities in School (3)	Elective	DO THIS – Mid-term check-in with advisor	
•	0	Child Development 205 – Development of Exceptional Child (3)	Elective	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid	
•	•	Sociology 211 – Race and Ethnic Relations (3)	Social/Behavioral Sciences	DO THIS – Prepare documentation	
•	0	Elective course (3)	Elective		
			16 CREDIT HOURS		
DG	ECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Speech 101 – Fundamentals of Speech (3)	Communications		
•	•	Philosophy 107 – Ethics (3)	Humanities/Fine Arts	COMPLETION of Associate in Arts degree in K-12 Special Education Teacher	
•	•	Physical Sciences 107 – Current Public Issues in Physical Sciences (3)	Mathematics/Science	DO THIS – Apply online for degree and graduation	
•	0	Child Development 225 – Supervision of Exceptional Child (3)	Elective	DO THIS – Apply to four-year schools of your choice	
•	0	Education 208 – School Leadership and Support Professionals (3)	Elective		
			15 CREDIT HOURS		

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DEGREE CODE: AS 0211

## PATHWAY: Middle School Science Teacher

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you love science and want to inspire others to be independent thinkers, you might enjoy a career as a science teacher. The Middle School Science Teacher pathway prepares students to teach general science or a combination of biological and physical science at the middle school grades. You'll find yourself using computers to do research and interactive science lessons, and participating in activities that range from lab experiments to nature field trips. Most aspiring science teachers will need a bachelor's degree and from an IL teacher certification program. Get started now by earning your associate degree from City Colleges, transfer to a four-year teacher certification program as a junior, and start a career as the mad science teacher in a middle school.

This is an **example course sequence** for students interested in pursuing Science Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101		
ESL/English 100	□ Reading 125	□ Mathematics 99			

#### (continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

GECC	C SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 101 – Composition I (3)	Communications		
•	Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
•	Biology 121 – Biology I (5)	Mathematics/Science		
•	Education 101 – Introduction to Education (3)	Elective	-	
		15 CREDIT HOURS		
GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 102 – Composition II (3)	Communications		
•	Education 102 – Using Technology in the Classroom (3)	Elective	ALMOST halfway through Associate in Science deg	
•	Mathematics 143 – Precalculus (6)	Required Program Core	DO THIS – Meet with advisor to confirm plans	
•	Biology 122 – Biology II (5)	Required Progarm Core		
		17 CREDIT HOURS		
GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	History 112 – History of American People from 1865 (3)	Social/Behavioral Sciences		
•	Chemistry 201 – General Chemistry (5)	Required Program Core	DO THIS – Mid-term check-in with advisor	
•	Philosophy 107 – Ethics (3)	Humanities/Fine Arts	DO THIS – Go to Career Center to explore both	
•	Speech 101 – Fundamentals of Speech (3)	Communications	continued education and employment options	
•	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences		
		17 CREDIT HOURS		
GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)		
•	Education 103 – Students with Disabilitites in School (3)	Elective	COMPLETION of Associate in Science degree in	
•	Fine Arts course (3)	Humanities/Fine Arts	Middle School Science Teacher	
•	Chemisty 203 – General Chemistry II (5)	Required Program Core	DO THIS – Apply online for degree and graduation	
•	Political Science course (3)	Social/Behavioral Sciences		
		17 CREDIT HOURS		
	MINIMUM TOTAL:	66 CREDIT HOURS		

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Education



DEGREE CODE AA 0210

## PATHWAY: Middle/High School English Teacher

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

How can you tell if you'd enjoy turning students on to the wonders of words? If you're entranced by English and enjoy helping others, consider the Middle/High School English Teacher pathway. You'll learn how to teach English grammar, composition and literature at grades ranging from seventh through twelfth grade. Get started now by earning your associate degree from City Colleges, transfer to a four-year college as a junior, and earn your Bachelor's degree and teacher certification credential. You could become the middle or high school teacher everyone dreams of having.

This is an **example course sequence** for students interested in pursuing English Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American Studies 101	World Languages	
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	□ Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	English 101 – Composition I (3)	Communications		
•	٠	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
•	•	Literature 110 – Introduction to Literature (3)	Humanities/Fine Arts		
•	0	Education 101 – Introduction to Education (3)	Elective		
•	•	Fine Arts course (3)	Humanities/Fine Arts		
			16 CREDIT HOURS		
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	English 102 – Composition II (3)	Communications		
•	٠	Literature 111 – Poetry (3) <b>OR</b> Literature 112 – Drama (3) <b>OR</b> Literature 113 – Fiction (3)	Humanities/Fine Arts		
•	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	ALMOST halfway through Associate in Arts degree	
•	۰	English 241 – Creative Writing (3) <b>OR</b> English 242 – Intercultural Communication (3) <b>OR</b> English 243 – Creative Writing: Fiction (3) <b>OR</b> English 245 – Creative Writing: Poetry (3) <b>OR</b> other (3)	Elective	DO THIS – Meet with advisor to confirm plans	
٠	0	Education 102 – Using Technology in the Classroom (3)	Elective		
			15 CREDIT HOURS		

## PROGRAMS OF STUDY Education

#### (continued from previous page)

D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Speech 101 – Fundamentals of Speech (3)	Communications		
•	•	Biology 114 – General Education Biology (4) <b>OR</b> Biology 115 – Human Biology (4)	Mathematics/Science	DO THIS – Mid-term check-in with advisor DO THIS – Go to Career Center to explore both continued education and employment options	
•	•	History 112 – History of the American People (3)	Social/Behavioral Sciences		
•	0	Literature course (3)	Elective		
•	۰	Education 103 – Students with Disabilities in School (3)	Elective		
			16 CREDIT HOURS		
D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	Sociology 211 – Race and Ethnic Relations (3)	Social/Behavioral Sciences (HD)		
•	•	Physical Sciences 107 – Current Public Issues (3)	Mathematics/Science	COMPLETION of Associate in Arts degree in Middle	
•	٠	Education 208 – School Leadership and Support Professionals (3)	Elective	High School English Teacher	
•	٠	Literature course (3)	Elective	DO THIS – Apply online for degree and graduation	
•	٠	English 201 – Advanced Composition (2) <b>OR</b> other Elective (3)	Elective		
			15 CREDIT HOURS		

#### D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 🙆 ඟ 😡 💬



DEGREE CODE: AS 0211

## PATHWAY: Middle/High School Mathematics Teacher

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

Many people think of mathematics as a dry, abstract subject that has little to do with real life. Nothing could be further from the truth. We can thank mathematics for what we know about the reaches of outer space and the depths of the ocean. We need mathematics to build skateboard ramps, balance checkbooks, and bake cookies. And those who take their mathematics studies beyond the basics have a world of great career options ahead of them. If you enjoy puzzling over mathematics problems and explaining concepts to others, the Middle/High School Mathematics Teacher pathway might be for you. This pathway allows you to transfer to a four-year college as a junior, earn your bachelor's degree and teacher certification and become a mathematics teacher.

This is an **example course sequence** for students interested in pursuing Mathematics. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101		
ESL/English 100	□ Reading 125	□ Mathematics 99			

#### (continued from previous page)

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

GE	cc	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		English 101 – Composition I (3)	Communications		
		Education 101 – Introduction to Education (3)	Elective	DO THIS – Meet with advisor to discuss academic	
		Biology 114 – General Education Biology <b>OR</b> Biology 115 – Human Biology (4)	Mathematics/Science	goals and plan coursework	
•		Mathematics 125 – Introductory Statistics (4)	Mathematics/Science		
0	•	Elective course (1-3)	Elective		
			15-17 CREDIT HOURS		
GEG	сс	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		English 102 – Composition II (3)	Communications		
•		Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	ALMOST halfway through Associate in Science	
0		Education 102 – Using Technology in the Classroom (3)	Elective	degree DO THIS – Meet with advisor to confirm plans	
0		Mathematics 143 – Precalculus (6) ${\bf OR}$ Mathematics 140 – College Algebra (4) and Mathematics 141 – Plane Trigonometry (3) ${\bf OR}$ higher	Required Program Core		
			15-16 CREDIT HOURS		
GE	сс	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		Speech 101 – Fundamentals of Speech (3)	Communications		
•		History 112 – History of American People from 1865 (3)	Social/Behavioral Sciences	DO THIS – Mid-term check-in with advisor	
0		Education 103 – Students with Disabilities in School (3)	Elective	DO THIS – Go to Career Center to explore both	
0		Mathematics 207 – Calculus and Analytic Geometry I (5) <b>OR</b> higher	Required Program Core	continued education and employment options	
•		Philosophy 107 – Ethics (3)	Humanities/Fine Arts		
			17 CREDIT HOURS		
GE	сс	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		Political Science course (3)	Social/Behavioral Sciences		
•		Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)	COMPLETION of Associate in Science degree	
•		Fine Arts course (3)	Humanities/Fine Arts	Middle/High School Mathematics Teacher	
•		Physical Sciences course (3)	Mathematics/Science	DO THIS – Apply online for degree and graduation	
0		Mathematics 208 – Calculus and Analytic Geometry II (5) OR above	Required Program Core		
			17 CREDIT HOURS		
		MINIMUM TOTAL:	64 CREDIT HOURS		

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AS 0211

## PATHWAY: Middle/High School Social Science Teacher

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Kids deserve to learn about the world-its history, cultures, behaviors, and politics-so that they can shape the future. They need facts. And they need the skills to analyze and organize those facts so they can form opinions and take action. Can you see yourself empowering kids to become more engaged citizens? If so, consider our social science teacher education pathway. You'll learn how to teach general social studies to students of various ages. You'll take social studies courses, such as history and political science, as well as courses in lesson planning, classroom management, and psychology. Get started by earning your associate degree with City Colleges of Chicago, transfer to a four-year university as a junior to earn your bachelor's degree and teacher certification. You could make a career as a social science teacher.

This is an **example course sequence** for students interested in pursuing Social Science Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	World Languages
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 101 – Composition I (3)	Communications	
•	٠	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss
•	٠	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)	academic goals and plan coursework
•	0	Education 101 – Introduction to Education (3)	Elective	
•	٠	Social Science 102 – General Course II Social Science (3)	Social/Behavioral Sciences	
			16 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	English 102 – Composition II (3)	Communications	
•	٠	Humanities 205 – World Literature I (3)	Humanities/Fine Arts	ALMOST halfway through Associate in
•	٠	History 112 – History of the American People (3)	Social/Behavioral Sciences	Arts degree DO THIS – Meet with advisor to confirm
•	٠	Political Science course (3)	Social/Behavioral Sciences	plans
•	0	Education 102 – Using Technology in the Classroom (3)	Elective	
			15 CREDIT HOURS	

#### (continued from previous page)

D	GECC	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Speech 101 – Fundamentals of Speech (3)		Communications	
٠	٠	Biology 114 – General Education Biology (4) OR Biology 115 – Human	Biology (4)	Mathematics/Science	DO THIS - Mid-term check-in with advisor
٠	۰	Psychology 201 – General Psychology (3)		Elective	<b>DO THIS</b> – Go to Career Center to explore both continued education and employment
٠	۰	History course (3)		Elective	options
٠	۰	Education 103 – Students with Disabilities in School (3)		Elective	
				16 CREDIT HOURS	
D	GECC	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	۰	History course (3)		Elective	
•	٠	Fine Arts course (3)		Humanities/Fine Arts	COMPLETION of Associate in Arts degree in Middle/High School Social
•	٠	Physical Sciences 107 – Current Public Issues (3)		Mathematics/Science	Science Teacher
•	۰	Education 208 – School Leadership and Support Professionals (3)		Elective	DO THIS – Apply online for degree and graduation
•	٠	Literature 130 – Children's Literature $\mathbf{OR}$ other Elective course (3)		Elective	Č
				15 CREDIT HOURS	
		Ν	MINIMUM TOTAL:	62 CREDIT HOURS	

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DEGREE CODE: AA 0210

### **PATHWAY:** Spanish Teacher

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Studying a language has its own momentum: the more you learn, the more you want to learn. The more you learn, the more you want to share with others. Do you enjoy learning Spanish? Can you picture yourself teaching it to others? If so, consider the Spanish Teacher education pathway. You'll learn how to teach Spanish to students of various ages. In addition to taking classes in Spanish language, literature, and culture, you'll study education topics, such as foreign language teaching methods and educational psychology. With your associate degree in Spanish Teacher Education from City Colleges of Chicago, you can transfer to a four-year college as a junior and earn your bachelor's degree.

This is an **example course sequence** for students interested in pursuing Spanish Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	U World Languages
□ ESL 99	ESL Reading 100	Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

## **PROGRAMS OF STUDY Education**

#### (continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	•	English 101 – Composition I (3)	Communications	_		
•	•	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss academ		
•	٠	Fine Arts course (3)	Humanities/Fine Arts	goals and plan coursework DO THIS – Begin research on four-year schools		
•	٠	Education 101 – Introduction to Education (3)	Elective			
•	٠	Spanish course (4)	Elective			
			17 CREDIT HOURS			
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	•	English 102 – Composition II (3)	Communications			
	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	DO THIS – Mid-term check-in with advisor		
	۰	Spanish course (4)	Elective	DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year		
	٠	Education 102 – Using Technology in the Classroom (3)	Elective	schools for potential transfer		
	٠	Humanities 205 – World Literature I (3)	Humanities/Fine Arts			
			16 CREDIT HOURS			
	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
	٠	Biology 114 – General Education Biology (4) <b>OR</b> Biology 115 – Human Biology (4)	Mathematics/Science	DO THE Mid form check in with advisor		
	٠	Anthropology 202 – Cultural Anthropology (3)	Social/Behavioral Sciences	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year		
	٠	Spanish course (4)	Elective	funding outlets such as scholarships and aid DO THIS – Prepare documentation		
•	٠	Speech 101 – Fundamentals of Speech (3)	Communications			
			14 CREDIT HOURS			
	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
	٠	Humanities 145 – Introduction to Diversity/Ethnic Studies (3)	Humanities (HD)			
	٠	Physical Sciences 107 – Current Public Issues in Physical Sciences (3)	Mathematics/Science	COMPLETION of Associate in Arts Degree in Spanish Teacher		
	•	Spanish course (4)	Elective	DO THIS – Apply online for degree and graduat		
•	٠	History 142 – History of World Civilization from 1500 (3)	Social/Behavioral Sciences	DO THIS – Apply to four-year schools of your choice		
•	•	Education 103 – Students with Disabilities in School (3)	Elective			
			16 CREDIT HOURS			

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Healthcare

# HEALTHCARE

#### COLLEGE TO CAREERS LOCATION: MALCOLM X COLLEGE

When illness threatens the well-being of yourself or a loved one, nothing can be more comforting than the knowledge and expertise of a qualified healthcare professional. People in the health sciences work to prevent, diagnose, and treat illnesses and injuries. Some work with specific tissues or fluids, like phlebotomists, while others, like morticians, work with human remains. If you value helping others, and you enjoy science classes, consider a career in Healthcare.

### DEGREE AND CERTIFICATE PATHWAYS OFFERED

	D	AC	BC		D	AC	BC
Addictions Studies (pg. 81)	•	•	•	Mortuary Science (pg. 95)	•	0	0
Community Healthcare Worker (pg. 82)	٠	٠	٠	Nursing (pg. 97)	٠	0	•
Dental Assistant (pg. 203)	•	•	•	Practical Nursing (pg. 100, 101)	•	•	•
Dental Assisting (pg. 83)	٠	٠	٠	RN Completion (pg. 101)	•	0	0
Dental Hygiene (pg. 84)	٠	•	۰	Basic Nursing Assistant (pg. 99)	0	0	٠
EKG Technician (pg. 203)	۰	0	•	Basic Nursing Assistant/Health Sciences (pg. 97)	0	0	٠
Emergency 911 Dispatch (pg. 86)	٠	٠	•	Basic Nursing Assistant/Nursing Fundamentals (pg. 205)	0	0	•
Emergency Medical Technician: Basic (pg. 203)	۰	•	•	Nursing Home Administration (pg. 99)	0	0	٠
Emergency Medical Technician (pg. 203)	•	•	•	Occupational Therapy Assistant (pg. 103)	•	•	•
Emergency Medical Technician II: Paramedic (pg. 204)	•	٠	٠	Personal Fitness Trainer (pg. 105)	0	0	•
Gerontology Aide (pg. 205)	۰	•	•	Pharmacy Technician (pg. 206)	0	0	*
Gerontology Specialist (pg. 205)	٠	0	۰	Pharmacy Technology (pg. 106)	0	•	0
Health Information Management (HIM) (pg. 87)	٠	0	•	Phlebotomy (pg. 107)	0	0	٠
Health/Physical Education (pg. 89)	٠	•	۰	Accelerated Phlebotomy (pg. 108)	0	0	*
Health Professions (pg. 90)	٠	•	•	Phlebotomy Technician (pg. 108)	۰	•	٠
Homemaker/Home Health Aide (pg. 91)	٠	٠	•	Physical Therapy Assistant (pg. 206)	*	0	0
Massage Therapy (pg. 91)	•	٠	•	Radiography (pg. 109)	•	0	•
Medical Assistant (Basic) (pg. 93)	•	٠	•	Renal Dialysis Technology (pg. 111)	•	•	•
Medical Assisting (pg. 94)	٠	٠	•	Respiratory Care (pg. 112)	•	0	0
Medical Billing (pg. 87)	•	٠	٠	Sterile Processing Clinical (pg. 114)	0	•	٠
Medical Coding (pg. 87)	۰	•	۰	Surgical Technology (pg. 115)	•	0	0

Students in Healthcare may take classes like the following:

English 101	Composition I May require taking English readiness courses	
Biology 121	Biology I College level English eligibility required	
Health Professions 101	Trends and Issues in Healthcare	
Health Professions 102	Delivery	
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*PENDING APPROVAL		



DEGREE CODES: AAS 0344 AC 0343 BC 0345

## **PATHWAY:** Addictions Studies

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Addictions Studies. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Addictions Studies. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS Degree program in Addictions Studies is ideal for prospective mental health practitioners or those already working in the field who wish to receive training and credentials in Addictions Studies. Many Addictions Studies practitioners find employment in medical and non-medical detoxification centers, rehabilitation programs, community mental health centers and family service centers, halfway houses, therapeutic communities, business, or industry. Some combine counseling with such primary professions as nursing, social work, school guidance counseling, or the clergy.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	□ Social Services 101 – Introduction to Social Work
□ ESL 99	ESL Reading 100	Mathematics 98	Mental Health 223 – Introduction to Addictions Studies
ESL/English 100	□ Reading 125	□ Mathematics 99	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

DA	C	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	English 101 – Composition I (3)	Communications	
•	•	•	Mental Health 223 – Introduction to Addictions Studies (3)	Required Program Core	
•	•	•	Social Services 101 – Introduction to Social Work (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
•	•	•	Humanities/Fine Arts course (3)	Humanities/Fine Arts	
•	•	•	Biology 107 – Nutrition: Consumer Education (3)	Mathematics/Science	
				15 CREDIT HOURS	
DA	C	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Child Development 101 – Human Growth and Development I (4)	Required Program Core	
•	•	•	Mental Health 224 – Principles and Practices of Addictions Studies (3)	Required Program Core	DO THIS – Meet with advisor to discuss Basic Certificate,
•	•	•	Psychology 201 – General Psychology (3)	Required Program Core	Advanced Certificate, Associate in Applied Science, and four-
•	•	•	Social Services 109 – Report Writing for Social Service Aides (3)	Required Program Core	year transfer options
•	•	•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	
				16 CREDIT HOURS	
DA	C	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Mental Health 228 – Principles of Mental Health Practices (3)	Required Program Core	
•	•	•	Child Development 102 – Human Growth and Development II (3)	Required Program Core	
•	•	0	Psychology 213 – Abnormal Psychology (3)	Required Program Core	
•	•	٠	Mental Health 230 – Addictions and Family Treatment (3)	Required Program Core	
•	•	۰	Humanities course (3)	Humanities	
				15 CREDIT HOURS	

#### (continued from previous page)

D AC	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	•	Mental Health 229 – Practicum in Addictions Treatment (6)	Required Program Core	COMPLETION Completion of Basic Certificate in Addictions
• •	0	Social Services 201– Principles of Social Work Practice (3)	Required Program Core	Studies COMPLETION of Advanced Certificate in Addictions Studies
• •	•	Mental Health 231 – Addiction Treatment of Special Populations (3)	Required Program Core	DO THIS – Apply online for advanced certificate
• •	•	Program Elective (3)	Program Elective	COMPLETION of Associate in Applied Science in Addictions Studies
• •	۰	Social Services 212 – Introduction to Group Process (3)	Required Program Core	<b>DO THIS</b> – Apply online for degree and graduation
			18 CREDIT HOURS	
		MINIMUM TOTAL:	64 CREDIT HOURS	

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## **PATHWAY:** Community Health Worker

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Community Health Worker. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), an Advanced Certificate (AC) and an Associate in Applied Science (AAS) Degree in Community Health Care Worker. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The Community Health Care Worker program is designed to focus on competencies universally required for primary and preventive health care. The curriculum also serves students who may wish to enter into a nursing program or other allied health professions. Research shows that many health educator programs at the university level (bachelor, masters) require as a core curriculum the same knowledge and competence areas incorporated into this program.

DEGREE CODES: AAS 0716 AC 0717 BC 0718

#### Choose your courses with your College Advisor.

	athematics pre-degree requ , ACT or department chair r	College-level courses that can be taken while in pre-degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ College Success
□ ESL/English 98	ESL/Reading 99	□ FS Mathematics II	
□ ESL 99	ESL Reading 100	□ Mathematics 98	
ESL/English 100	□ Reading 125	□ Mathematics 99	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	۰	English 101 – Composition I (3)	Communications	
• •	٠	Health Technology 701 – Introduction to Community Health Work (3)	Required Program Core	
• •	۰	General Education course (3)	General Education (HD)	DO THIS – Meet with advisor to discuss academic goals and plan
• •	۰	Biology 115 – Human Biology (4)	Mathematics/Science	coursework
• •	۰	Health 100 – Health and the Public (3)	Required Program Core	
• •	٠	Humanities 201 – General Course I (3) <b>OR</b> Humanities 202 – General Course II (3)	Humanities/Fine Arts (HD)	
			19 CREDIT HOURS	

#### (continued from previous page)

D AC BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• • •	Health 110 – Public Health and Global Societies (3)	Required Program Core	
• • •	Health 120 – Public Health and the Study of Disease and Epidemics (3)	Required Program Core	COMPLETION of Basic Certificate in Community Health Worker
• • •	Health Technology 705 – Nutrition, Exercise and Disease (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
• • •	Health Technology 706 – Human Development Overview (4)	Mathematics/Science	
		13 CREDIT HOURS	
D AC BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• • •	Child Development 101 – Human Growth and Development I (4)	Required Program Core	
• • •	Health Technology 707 – Portfolio Development (3)	Required Program Core	DO THIS – Go to Career Center to explore both continued education
• • •	Health Technology 708 – Adult and Senior Health (3)	Required Program Core	and employment options
• • •	Health Technology 709 – Substance Abuse Issues (3)	Required Program Core	DO THIS – Mid-term check-in with advisor
• • •	Health Technology 710 – Mental Health Issues (3)	Required Program Core	
		16 CREDIT HOURS	
D AC BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• • •	Child Development 102 – Human Growth and Development II (3)	Required Program Core	COMPLETION of Advanced Certificate in Community Health Worker
• • •	Health Technology 711 – Case Management Fundamentals (3)	Required Program Core	COMPLETION of Associate in Applied Science in Community Health Worker
• • •	Health Technology 712 – Field Experience First Aid and CPR (6)	Required Program Core	DO THIS – Apply online for advanced certificate
•••	Social Science 101 – General Course I (3)	Social/Behavioral Sciences	DO THIS – Apply online for degree and graduation
		15 CREDIT HOURS	
	MINIMUM TOTAL:	63 CREDIT HOURS	

#### D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (MX) (DH) (TR) (HX)

**ocus Area:** Healthcar



### PATHWAY: Dental Assisting

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Dental Assisting. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC). The Dental Assisting program prepares dental assistants to meet employment opportunities to assist dentists during patient treatment procedures. Classroom, lab, and clinical instruction provide students with a broad background in all aspects of dentistry. Clinical internship is provided by area dental offices and clinics under the guidance of dentists and assistants in the communities throughout the district. The program also includes courses which teach expanded functions for dental assistants who have demonstrated proficiency through education. Upon successful completion, students will be eligible to obtain an accredited certificate in Dental Assisting and take the Dental Assisting national board examination.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.

ENGLISH PLACEMENT	READING PLACEMENT
ESL/FS Writing	□ ESL/FS Reading
ESL/English 98	ESL/Reading 99
□ ESL 99	ESL Reading 100
ESL/English 100	□ Reading 125

### Healthcare

#### (continued from previous page)

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
<ul> <li>Dental Assisting 100 – Oral and Dental Anatomy (2)</li> </ul>	Required Program Core	
• Dental Assisting 101 – Dental Medical Emergencies (3)	Required Program Core	
Dental Assisting 102 – Dental Assisting Procedures I (5)	Required Program Core	DO THIS – Meet with advisor to confirm plans
• Dental Assisting 104 – Dental Radiography I (3)	Required Program Core	
• Dental Assisting 106 – Head and Neck Anatomy (3)	Required Program Core	
	16 CREDIT HOURS	
D SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• Dental Assisting 103 – Dental Assisting Procedures II (4)	Required Program Core	
Dental Assisting 105 – Dental Radiography II (2)	Required Program Core	COMPLETION of Advanced Certificate in Dental Assisting
• Dental Assisting 107 – Prevention (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
• Dental Assisting 109 – Dental Office Procedures (1)	Required Program Core	DO THIS – Apply online for Advanced Certificate
• Dental Assisting 112 – Dental Assisting Externship (5)	Required Program Core	
	15 CREDIT HOURS	
MINIMUM TOTAL:	31 CREDIT HOURS	

#### D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (MX) (DA) (TB) (HV) (WB)



**DEGREE CODE:** AAS 0222

## **PATHWAY:** Dental Hygiene

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a degree in Dental Hygiene. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Dental Hygiene.

The Dental Hygiene AAS degree program provides specialized educational, clinical, and therapeutic services in preventive oral healthcare preparing graduates for national, regional, and state board examinations required for licensure as registered dental hygienist. Major responsibilities include examination of the teeth and oral structures: the removal of plague, calculus and stain from teeth: exposing and developing x-rays; and educating patients in home oral healthcare techniques.

A unique partnership with the University of Illinois at Chicago (UIC) College of Dentistry gives students the opportunity to complete prerequisite and general education courses at Kennedy-King College followed by the core professional courses and clinical training at the UIC's College of Dentistry.

#### Prospective students must apply for admission into the Dental Hygiene Program

#### ADMISSIONS REQUIREMENTS

The program is very competitive, and having the minimum requirements does not indicate that you will be accepted into the program. Students having less than minimum requirements will not be considered. In order to enter the program students must:

Be at least 18 years of age

Graduate from an accredited high school or earn a GED

Have a minimum cumulative GPA of 2.5 in all college level work

- $\square$ Meet general admissions requirements for Kennedy-King College including successful completion of all prerequisite courses for the Dental Hygiene Program

□ Take the Health Occupations Aptitude Examination and Reading Test

"
 "C" grade or higher in Biology 121, Chemistry 121, Biology 226 and 227, Human Diversity course, and Microbiology 233

Please note: Semesters 1-3 are "pre-dental hygiene pathway". Semesters 4-9 occur after acceptance in the Dental Hygiene Program. Biology 120 is not required.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES	
<ul> <li>ESL/FS Writing</li> <li>ESL/English 98</li> <li>ESL 99</li> <li>ESL/English 100</li> </ul>	<ul> <li>ESL/FS Reading</li> <li>ESL/Reading 99</li> <li>ESL Reading 100</li> <li>Reading 125</li> </ul>	<ul> <li>FS Mathematics I</li> <li>FS Mathematics II</li> <li>Mathematics 98</li> <li>Mathematics 99</li> </ul>	College Success	
(continued on next page)				

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SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
iology 121 – Biology I (5)	Program Prerequisite	DO THIS – Meet with advisor to discuss academic goals and plan
hemistry 121 – Basic Chemistry I (4)	Program Prerequisite	Coursework
	9 CREDIT HOURS	
SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
iology 226 – Human Structure and Function I (4)	Program Prerequisite	
uman Diversity course (3)	Program Prerequisite	<b>DO THIS</b> – Meet with advisor to confirm plans
	7 CREDIT HOURS	
SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
licrobiology 233 – General Microbiology (4)	Program Prerequisite	
iology 227 – Human Structure and Function II (4)	Program Prerequisite	<b>DO THIS</b> – Apply to the Dental Hygiene Program
	8 CREDIT HOURS	
SEMESTER 4 - SUMMER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Dental Hygiene 112 - Concepts of Preventive Therapy I (2)	Required Program Core	
Nathematics 118 – General Education Mathematics or higher (4) keluding Mathematics 140	Mathematics/Science	
	6 CREDIT HOURS	
SEMESTER 5 - FALL	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
ental Hygiene 121 – Principles of Dental Hygiene I (lecture) (2)	Required Program Core	
ental Hygiene 123 – Principles of Dental Hygiene I (lab) (2)	Required Program Core	
ental Hygiene 125 – Nutrition and Biochemistry (2)	Required Program Core	
Pental Hygiene 131 – Oral Structures and Function (3)	Required Program Core	
ental Hygiene 133 – Head and Neck Anatomy (2)	Required Program Core	
ental Hygiene 135 – Concepts of Preventative Therapy II (1)	Required Program Core	
inglish 101 – Composition I (3)	Communications	
	15 CREDIT HOURS	
SEMESTER 6 - SPRING	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
ental Hygiene 122 – Principles of Dental Hygiene II (lecture) (2)	Required Program Core	
ental Hygiene 124 – Principles of Dental Hygiene II (lab) (3)	Required Program Core	
ental Hygiene 126 – Dental Radiology (3)	Required Program Core	DO TINO Masturith advisor to confirm plans
ental Hygiene 128 – General and Oral Pathology (2)	Required Program Core	DO THIS – Meet with advisor to confirm plans
ental Hygiene 130 – Dental Materials (3)	Required Program Core	
peech 101 – Fundamentals of Speech Communication (3)	Communications	
	16 CREDIT HOURS	
SEMESTER 7 - SUMMER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
ental Hygiene 200 – Summer Clinic (3)	Required Program Core	
ental Hygiene 202 – Critique of Dental Literature (1)	Required Program Core	
Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	

D SEMESTER 8 - FALL	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Dental Hygiene 233 – Expanded Functions (2)	Required Program Co	ore
Dental Hygiene 235 – Community Dental Health I (2)	Required Program Co	ore
Dental Hygiene 241 – Dental Pharmacology (2)	Required Program Co	DO THIS – Meet with advisor to confirm plans
Dental Hygiene 243 – Periodontics (2)	Required Program Co	ore
Dental Hygiene 251 – Clinical Dental Hygiene (5)	Required Program Co	ore
	13 CREDIT HOUR	S
SEMESTER 9 - SPRING	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Dental Hygiene 250 – Oral Diagnosis (2)	Required Program Co	ore
Dental Hygiene 252 – Clinical Dental Hygiene II (5)	Required Program Co	ore
Dental Hygiene 254 – Dental Specialties (1)	Required Program Co	COMPLETION of Associate in Applied Science Degree in Dental Hygien
Dental Hygiene 256 – Community Dental Health II (1)	Required Program Co	DO THIS – Apply online for degree and graduation
Dental Hygiene 258 – Ethics and Jurisprudence (2)	Required Program Co	ore
Dental Hygiene 260 – Senior Seminar (2)	Required Program Co	ore
	13 CREDIT HOUR	S
MINIMU	IM TOTAL: 92 CREDIT HOUR	25



## PATHWAY: Emergency 911 Dispatch

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning an Emergency 911 Dispatch certificate. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability. The Emergency 911 Dispatch certificate program provides basic tools to help students seek and maintain an "Emergency Services Telecommunication" position with any public safety agency in the country (Police, Fire, EMS or Stand-alone Dispatch Center). Students will be exposed to samples of state-of-the-art computer equipment commonly used in many dispatch centers nationwide and will also learn call taking and dispatch skills as well as hear 911 calls.

DEGREE CODE: BC 0897

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of	f part-time students b	v adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS			
•	Health 152 – Emergency (911) Dispatch (2.5)	Required Program Core	<b>COMPLETION</b> of Basic Certificate in Emergency 911 Dispatch <b>DO THIS</b> – Meet with advisor to discuss academic goals and plan coursework			
	MINIMUM TOTAL:	2.5 CREDIT HOURS				
D	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 💿 📧 🐼 👓 💷 🐨					



DEGREE CODES: AAS 0393 AC (MC) 0394 BC (MB) 0395

## **PATHWAY:** Health Information Management (HIM)

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Health Information Management. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Medical Billing, an Advanced Certificate (AC) in Medical Coding and an Associate in Applied Science (AAS) Degree in Health Information Management.

The Health Information Management (HIM) program prepares students with the knowledge, skills, and abilities to organize and manage health information data in both paper and electronic systems. Students will acquire knowledge and develop application skills for a variety of classification systems to code for reimbursement, databases and registries, and the maintenance of patients' medical and treatment histories. Program graduates will be eligible to earn the following: a basic certificate in billing, an advanced certificate in coding and/or an AAS degree in Health Information Management. This program prepares AAS for the Registered Health Information Technician Exam administered by the Commission on Accreditation for Health Informatics and Health Information Education (CAHIIM). Completion of this program leads to roles in data collection, data abstraction, enhanced coding and monitoring, maintenance and reporting activities. The Basic Certificate will prepare students to obtain entry level positions as medical billers in hospitals, physician private practices, as well as insurance companies. The Advanced Certificate in medical coding equips students for roles as medical coders in hospitals, physician private practices, as well as insurance companies. The AAS will prepare students for advanced biller/ coder roles as well as for entry level roles in the information systems department of healthcare systems and insurance companies.

#### Prospective students must apply for admission into the Health Information Management Program

HEALTH INFORMATION MANAGEMENT PROGRAM ADMISSIONS REQUIREMENTS					
To be considered for admission to the Health Information Management Program of Study, a student must:					
Have at least a GPA of 2.0	□ Completion of Biology 120 with a grade of "C" or better				
Have an interview with the Health Information Management (HIM) Director or Department Chairperson	Students who meet the admission requirements above will be required to receive approval from the Director or Department Chairperson of HIM				
English 101 eligibility	Background Check				
Chudanta must attend a Lightheara arientation prior to the start of the compater					

□ Students must attend a Healthcare orientation prior to the start of the semester

#### BACKGROUND CHECK

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo finger printing prior to licensing with the state of Illinois. Students should consult with a College Advisor if any of these requirements are a concern.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.
	ENGLISH PLACEMENT READING PLACEMENT MATHEMATICS PLACEMENT		ELECTIVE COURSES	
[	□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	College Success
[	□ ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Computer Information Systems 145 – Introduction to Database on
[	□ ESL 99	ESL Reading 100	□ Mathematics 98	Microcomputers
[	□ ESL/English 100	□ Reading 125	□ Mathematics 99	Mathematics 109 – Concepts in Mathematics

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

DACE	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	•	Biology 120 – Terminology for Medical Careers (3)	Program Prerequisite	
• •	•	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	DO THIS – Meet with advisor to review portfolio and discuss BC, AC, AAS and four-year transfer options
• •	•	English 101 – Composition I (3)	Communications	
• •	•	Health Professions 102 – Health Career Studies (3)	Required Program Core	
			12 CREDIT HOURS	

#### (continued from previous page)

AC BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Biology 116 – Anatomy and Physiology (4)	Required Program Core	COMPLETION of Basic Certificate in Medical Billing CERTIFICATION in CPR
• •	Computer Information Systems 145 – Introduction to Database on Microcomputers (3)	Required Program Core	ELIGIBLE to take certified medical billing specialist certification exam DO THIS – Register for the certified medical billing specialist
• •	Health 107 – Pharmacology (4)	Required Program Core	certification exam
• •	Health Information Management 101 – Introduction to Health Information Management (3)	Required Program Core	DO THIS – Meet with Career Planning and Placement Advisor DO THIS – Prepare Biography and Resume DO THIS – Meet with advisor to review portfolio and discuss AC, AAS a
• •	Health Information Management 102 – Medical Billing (2)	Required Program Core	four-year transfer options
		16 CREDIT HOURS	
AC BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Health 102 – Medical Law and Ethics (3)	Required Program Core	
• •	Health Information Management 103 – Basic Coding ICD9/ ICD10 (3)	Required Program Core	
• •	Health Information Management 104 – Basic Coding CPT-4 (3)	Required Program Core	
• •	Health Information Management 201 – Clinical Pathophysiology (3)	Required Program Core	
0 0	Health Information Management 202 – Advanced Coding ICD9/10 and CPT-4 (3)	Required Program Core	
		15 CREDIT HOURS	
AC BC	SEMESTER 4 - SUMMER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
0 0	Health Information Management 204 – Health Care Statistics (3)	Required Program Core	COMPLETION of Advanced Certificate in Medical Coding ELIGIBLE to take certified medical coder certification exam
• •	Health Information Management 205 – Health Information Management Seminar I (1)	Required Program Core	DO THIS – Apply online for the advanced certificate DO THIS – Register for the certified medical codercertification exam DO THIS – Meet with Career Planning and Placement Advisor DO THIS – Update biography and résumé DO THIS – Meet with advisor to review portfolio and apply to the AAS, program and four-year transfer options
		4 CREDIT HOURS	
AC BC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Health Information Management 203 – Reimbursement Methodologies (3)	Required Program Core	
• •	Health Information Management 206 – Health Information Management Seminar II (1)	Required Program Core	
• •	Health Information Management 207 – Health Information Management Practicum (1)	Required Program Core	COMPLETION of Associate in Applied Science in Health Information Management
• •	Mathematics 109 – Concepts in Mathematics (3)	Mathematics/Science	DO THIS – Apply online for degree and graduation
• •	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
• •	Speech 101 – Fundamentals of Speech Communication (3)	Communications	
• •	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	
		17 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 00 (KK) (MR) (MR) (MR)

ocus Area: Healthcare



AA 0210

## **PATHWAY:** Health/Physical Education

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Would you enjoy coaching a basketball team, teaching a dance class, or training athletes? Do you want to help kids become confident, coordinated, and team-spirited? Interested in the science behind the moves? If so, consider our health/physical education pathway. You might study anatomy and physiology, how to be an effective coach, how to teach physical education and how to adapt physical education for students with disabilities. This pathway is designed so you can transfer to a four-year university as a junior, get your bachelor's degree, and start a career as a physical education teacher, physical trainer, coach, or recreational therapist and more.

This is an example course sequence for students interested in earning a degree in Health/Physical Education. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Humanities/Fine Arts (choose 1):	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Art 103, Music 121, Fine Arts 104, African-American Studies 101	World Languages
□ ESL 99	ESL Reading 100	□ Mathematics 98		Health 250 – Health Education
ESL/English 100	Reading 125	□ Mathematics 99	Life Sciences: Biology 107	Health 251 – First Aid

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	English 101 – Composition I (3)	Communications	
• •	Mathematics 121 – Mathematics for Elementary Teachers I (4)	Elective	DO THIS – Meet with advisor to confirm plans
• •	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	DO THIS – Research four-year schools
• •	Speech 101 – Fundamentals of Speech (3)	Communications	
		13 CREDIT HOURS	
D GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	English 102 – Composition II (3)	Communications	
• •	Mathematics 122 – Mathematics for Elementary Teachers II (4)	Mathematics	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss options and create
• •	Biology 121 –Biology I (5)	Life Sciences	a short list of four-year schools for potential transfer
• •	Elective (3)	Elective	
		15 CREDIT HOURS	
DGECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	
•	Fine Arts course (3)	Fine Arts	DO THIS – Mid-term check-in with advisor
•	Humanities course (3)	Humanities	DO THIS – Seek additional four-year funding outlets such as scholarships and financial aid
0	Biology 226 – Human Structure and Function I (4)	Elective	DO THIS – Prepare documentation for college application
0	World Language course (4)	Elective	
		17 CREDIT HOURS	

### Healthcare

#### (continued from previous page)

D GECC	SEMESTER 4 - SUMMER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Biology 227 – Human Structure and Function II (4)	Elective	
• •	Chemistry 121 – Basic Chemistry I (4)	Physical Sciences	COMPLETION of Associate in Arts degree in Health/Physical Education
• •	Humanities/Fine Arts course (3)	Humanities/Fine Arts	DO THIS – Apply to four-year schools of your choice
• •	Psychology 224 – Life Span Psychology (3)	Social/Behavioral Sciences	DO THIS – Apply online for degree and graduation
• •	World Language course (4)	Elective	
		18 CREDIT HOURS	
	MINIMUM TOTAL:	63 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 04 (W) (W) (W) (W) (W)



DEGREE CODE: BC 0396

#### **PATHWAY:** Health Professions

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested health professions. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Health Professions. This does not represent a contract, nor does it guarantee course availability.

The Health Professions basic certificate provides the educational background required for pursuing a career in the healthcare industry. The curriculum covers the foundational knowledge, skills, and abilities needed to function as an entry level healthcare provider. The program focuses on student development in the following competencies essential to all healthcare providers: effective communication, accountability, cultural competence, use of information systems, and patient safety. Upon completion of the BC, students will demonstrate that they can deliver safe, culturally-competent, and evidence-based patient care.

#### Prospective students must apply for admission into the Health Professions Program

#### ADMISSIONS REQUIREMENTS

College reading skills as determined by one or more of the following: MXC Reading/Comprehension Placement test (e.g. COMPASS); grade of "C" or better in English 100. Students that meet all of the minimum admission requirements listed above will be scheduled for an interview with the program director. Students that complete this interview will be considered for admission to the program. Please note that admission in highly competitive and that not all students who are interviewed will be admitted. Students are advised to prepare for the interview, to arrive early, and to dress appropriately for a professional interview. Students are also advised to carefully prepare their application, giving special attention to content and format.

#### BACKGROUND CHECK

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo fingerprinting prior to licensing with the state of Illinois. Students should consult with a College Advisor if any of these requirements are a concern.

#### Choose your courses with your College Advisor.

Commun	ications and mathematics pre-degr	ee requirements. Placements based on COMPASS	, ACT or department chair recommendation.
E	NGLISH PLACEMENT	READING PLACEMENT	ELECTIVE COURSES
🗆 ESL/FS Writing	g [	□ ESL/FS Reading	□ College Success
ESL/English 98	8	ESL/Reading 99	
□ ESL 99	[	ESL Reading 100	
ESL/English 10	00 [	Reading 125	

	SEMESTER-BY-SEMESTER PRC All plans can be modified to fit the		
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Health Professions 101 – Patient Care Technician Training (6)	Required Program Core	
٠	Health Professions 102 – Health Career Studies (3)	Required Program Core	COMPLETION of Basic Certificate in Health Professions
٠	English 101 – Composition I (3)	Required Program Core	<b>DO THIS</b> – Prepare for the certification exam.
•	Biology 121 – Biology I (5)	Required Program Core	
	MINIMUM TOTAL:	17 CREDIT HOURS	
D =	DEGREE // AC = ADVANCED CERTIFICATE // BC = BASI		// Programs offered at: (DA) (KK) (MX) (DH) (TR) (HW) (WR



DEGREE CODE: BC 0895

## PATHWAY: Homemaker/Home Health Aide

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in home health. If this pathway is followed as outlined, student will earn a Basic Certificate (BC) in Homemaker/Home Health Aide. This does not represent a contract, nor does it guarantee course availability.

This program provides students with the knowledge and skills in personal care to evaluate and address the psychological, emotional, and physical needs of the older patient. The curriculum includes 17 skills mandated by The National Homecare Council, including all elements of personal care, vital signs, body mechanics, safety measures, resident's rights, infection control, communication, and observation. This program is ideal for students interested in employability in the home healthcare field, individuals in career transition, and selected high school students interested in the healthcare field.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.

	READING PLACEMENT		MATHEMATICS PLACEMENT
□ F\$	S Reading	🗆 FS Ma	thematics
			AN FOR FULL-TIME STUDENTS students by adding more semesters.
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Health 150 – Homemaker/Home Health Aide (4.5)	Required Program Core	COMPLETION of Basic Certificate in Homemaker/Home Health Aide
	MINIMUM TOTAL:	4.5 CREDIT HOURS	
D =	DEGREE // AC = ADVANCED CERTIFICATE // BC =	BASIC CERTIFICATE	Programs offered at: 00 (K) (00 (11) (11) (11)



DEGREE CODE: AC 0398

## **PATHWAY:** Massage Therapy

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in massage therapy. If this pathway is followed as outlined, student will earn an Advanced Certificate (AC) in Massage Therapy. This does not represent a contract, nor does it guarantee course availability.

The Advanced Certificate Massage Therapy program will provide students with the skills and knowledge to sit for the Massage and Bodywork Licensing Exam (MBLEX). Course completers will be eligible to apply for massage therapy licensing through the Illinois Department of Financial and Professional Regulation.

Provides the educational background required for pursuing a career as a massage therapist. The curriculum covers the foundational knowledge, skills, and abilities needed to function as a licensed massage therapist. The program focuses on student development in therapist-client communication, ethical massage practice, professionalism, business skills, self-care practices, and cultural competence.

Employment opportunities for massage therapist include spas, health clubs, chiropractic practices, physical therapy clinics, hospitals and private practice.

#### Prospective students must apply for admission into the Massage Therapy Program

ADMISSIONS REQUIREMENTS

For admission, students must be eligible for English 101. In addition, students must attend the Healthcare orientation prior to the start of the semester.

BACKGROUND CHECK

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo fingerprinting prior to licensing with the state of Illinois. Students should consult with a College Advisor if any of these requirements are a concern.

#### (continued from previous page)

#### Choose your courses with your College Advisor.

Communications and mathematics pre-deg	gree requirements. Placements based on COMPASS	, ACT or department chair recommendation.
ENGLISH PLACEMENT	READING PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ College Success
□ ESL/English 98	ESL/Reading 99	Psychology 201 – General Psychology
□ ESL 99	ESL Reading 100	□ Mathematics 109 – Concepts in Mathematics
ESL/English 100	□ Reading 125	

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT ACTIONS Biology 116 – Anatomy and Physiology (4) Required Program Core • Biology 120 - Terminology for Medical Careers 3) Required Program Core • Health Professions 102 - Health Career Studies (3) Required Program Core Exercise Science and Sports Studies 110 - Massage Therapy Practice (4) Required Program Core • 14 CREDIT HOURS **SEMESTER 2** CATEGORY ACHIEVEMENTS & NEXT ACTIONS Exercise Science and Sports Studies 111 - Integration of Massage Therapy (5) Required Program Core • DO THIS - Meet with advisor to review portfolio and Exercise Science and Sports Studies 120 - Massage Therapy Practice II (4) Required Program Core discuss Advanced Certificate, Associate of Applied • Science, and four-year transfer options Exercise Science and Sports Studies 121 - Integration of Massage Therapy II (5) Required Program Core • 14 CREDIT HOURS SEMESTER 3 CATEGORY ACHIEVEMENTS & NEXT ACTIONS AC Exercise Science and Sports Studies 210 - Massage Therapy Practice III (4) Required Program Core • DO THIS - Meet with Career Planning and Placement Advisor Exercise Science and Sports Studies 211 - Integration of Massage Therapy III (5) Required Program Core • DO THIS - Meet with advisor to review portfolio

		9 CREDIT HOURS	
AC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Exercise Science and Sports Studies 220 – Massage Therapy Practice IV (4)	Required Program Core	COMPLETION of Advanced Certificate in Massage
•	Exercise Science and Sports Studies 221 – Integration of Massage Therapy IV (5)	Required Program Core	Therapy ELIGIBLE to take MBLEX Exam DO THIS – Apply online for the advanced certificate DO THIS – Register for RHIT Exam DO THIS – Meet with Career Planning and Placement Advisor DO THIS – Update biography and résumé DO THIS – Meet with advisor to review portfolio
		9 CREDIT HOURS	
	MINIMUM TOTAL:	46 CREDIT HOURS	
D	= DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFIC	ATE	grams offered at: 💿 📧 🗪 🕞 🕫 🕬 🐨



### **PATHWAY:** Medical Assistant (Basic)

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in medical assistant. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC) in Medical Assistant. This does not represent a contract, nor does it guarantee course availability.

The Advanced Certificate program for Medical Assistant prepares students to become multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures in a doctor's office, clinic, hospital, or other medical setting.

DEGREE CODE: AC 0359

#### D

#### Prospective students must apply for admission into the Medical Assistant Program

MEDICAL ASSISTANT PROGRAM ADMISSIONS REQUIREMENTS

- □ Must complete application with College Advisor at Humboldt Park Vocational Educational Center (HPVEC).
- □ COMPASS placement into college level English and Mathematics, otherwise complete Mathematics 99 and English 100 with a "C" or higher.
- High School Diploma or GED required.
- Fall cohort admission only, application due in the summer.
   Course pre-requisites must be completed with a "C" or higher.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-deg	gree requirements. Placements based on COMPASS	, ACT or department chair recommendation.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I
ESL/English 98	ESL/Reading 99	□ FS Mathematics II
□ ESL 99	ESL Reading 100	□ Mathematics 98
ESL/English 100	□ Reading 125	□ Mathematics 99

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters

			The by adding more semesters.
AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Biology 120 – Terminology for Medical Careers (3)	Required Program Core	DO THIS – Apply to program
•	Health 251 – First Aid (3)	Required Program Core	
		6 CREDIT HOURS	
AC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Health 102 – Medical Law and Ethics (3)	Required Program Core	
•	Health 103 – Medical Assisting Clinical Procedures I (3)	Required Program Core	MATHEMATICS 99 with a "C" or better or placement test required
•	Health 106 – Administrative Procedures (3)	Required Program Core	for HEALTH 106
•	Health 107 – Pharmacology (4)	Required Program Core	
		13 CREDIT HOURS	
٩C	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Health 104 – Medical Assisting Clinical Procedures II (3)	Required Program Core	
•	Health 105 – Medical Careers Professional Development (2)	Required Program Core	
•	Health 108 – Fundamentals of Ambulatory Billing and Coding (3)	Required Program Core	
		8 CREDIT HOURS	
C	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Health 109 – Medical Assisting Externship Practicum (6)	Required Program Core	<b>COMPLETION</b> of Advanced Certificate in Medical Assistant <b>DO THIS</b> – Apply online for advanced certificate
		6 CREDIT HOURS	

**D** = DEGREE // **AC** = ADVANCED CERTIFICATE // **BC** = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT **CCC.EDU** 

Healthcare



BC 0386

## **PATHWAY:** Medical Assisting

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in medical assisting. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Medical Assisting. This does not represent a contract, nor does it guarantee course availability.

The Basic Certificate program in Medical Assisting is a hands-on training program encompassing the administrative, clinical and laboratory principles of the medical office. The program is recommended for those contemplating a career in health care professions.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.

ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I
ESL/English 98	ESL/Reading 99	□ FS Mathematics II
□ ESL 99	ESL Reading 100	□ Mathematics 98
ESL/English 100	□ Reading 125	□ Mathematics 99

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Biology 120 – Terminology for Medical Careers (3)	Required Program Core	
•	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	DO THIS – Apply to program
٠	Biology 115 – Human Biology (4)	Required Program Core	
		10 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Biology 132 – Clinical Lab Procedures for Medical Offices (5)	Required Program Core	
٠	Business 184 – Principles of Medical Office Administration (6)	Required Program Core	
		11 CREDIT HOURS	
BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Phlebotomy 109 – Phlebotomy Practicum and Seminary I (5)	Required Program Core	COMPLETION of Basic Certificate in Medical Assisting
		5 CREDIT HOURS	
	MINIMUM TOTAL:	26 CREDIT HOURS	
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DEGREE CODE: AAS 0257

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## PATHWAY: Mortuary Science

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Mortuary Science. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Mortuary Science.

For additional accreditation specific information related to the aims and objectives of the program, please see the following link: <a href="http://www.ccc.edu/colleges/malcolm-x/departments/Pages/Mortuary-Science.aspx">www.ccc.edu/colleges/malcolm-x/departments/Pages/Mortuary-Science.aspx</a>.

Prospective students must apply for admission into the Mortuary Science Program

MORTUARY SCIENCE PROGRAM ADMISSIONS REQUIREMENTS

- $\hfill\square$  Be at least 18 years of age.
- □ Official high school transcripts or General Education Certificate (GED) showing date of graduation or completion date (as applicable) for first-time college enrollment.
- Completion of 18 semester credit hours in Biology 120 or Health Science 102, Biology 121, English 101, Speech 101, and Mathematics 118 for fall/August day enrollment or, completion of 34 semester credit hours in Biology 120 or Health Science 102, Biology 121, English 101, Mathematics 118, Biology 226, Biology 227, Biology 130 and 131, Entrepreneur 201 and Computer Information Systems 120 for spring/May evening enrollment.
- Grade C or better in English 101 and Mathematics 098 or a 10th grade reading and mathematics level on the placement examination.
- □ Submission of completed application to the Mortuary Science Program.
- □ Submission of an essay.
- Interview with Program Director and Advisory Board Members
- Electronic notification of acceptance by program: April.
- □ Transfer status is not a guaranteed acceptance. Malcolm X College advisors perform transcript evaluations at the request of the student. Transcript evaluation forms are available at the Office of Admissions and Student Records on campus.

- Official college transcripts from all institutions attended.
- □ Grade Point Average must be at least "C" (GPA 2.5) for fall day enrollment or, Grade Point Average must be at least "C" (GPA 3.0) for Spring evening enrollment.
- Biology 226 and 227 general education courses for transferability must have been completed within five years of admission. If more than five years, these courses must be audited or successfully tested out through program assessment. All courses strictly in Mortuary Science must be taken in the program. Transfer students must submit a full application packet and meet with Program Director.
- □ Completion of all prerequisite electives and general education courses specified in day or evening curriculum.
- □ Submission of three letters of recommendation.
- □ \$40.00 non-refundable application fee with application submission.
- □ Application deadline: April 7 of every year.
  - Electronic applicant response to acceptance offer: April.
- □ Conviction of a felony: contact the IDFPR (217) 782-8556 to inquire if license would be awarded by state to practice in this profession.

#### ACCEPTANCE POLICY

- Candidates offered admission may not defer admission to a subsequent year. Applicants who decline admission must reapply.
- The Mortuary Science Program at Malcolm X College is accredited by the American Board of Funeral Service Education (ABFSE) 3414 Ashland Avenue, Suite G, St. Joseph, Missouri 64506 (816) 233-3747, <u>www.abfse.org</u>. Executive Director: Dr. Michael Smith. (Public notification of change in Executive Director, Spring 2011.)
- The Mortuary Science Program information and application is available on the web: www.malcolmx.ccc.edu/aas/mortuaryscience.
- The annual passage rate of first-time takers on the National Board Examination for the most recent three-year period for this institution and all ABFSE accredited funeral service education programs is posted on the American Board of Funeral Service Education web site <u>www.abfse.org</u>.

#### To graduate with an Associate in Applied Science degree in Mortuary Science and be eligible to apply to the IDFPR, the student must:

- $\hfill\square$  Complete the required prerequisite courses.
- $\hfill\square$  Earn at least a 2.0 grade point average, a "C" or higher in Mortuary Science courses.
- $\hfill\square$  Complete the 62 credit hours of the Mortuary Science curriculum.

- □ Register and complete the Arts and Sciences National Board Exam (NBE) within 45 days of the City Colleges of Chicago graduation date.
- □ Pass the Practice National Board Exam (PNBE) and Comprehensive Exit Examinations in capstone course.
- □ Meet all graduation requirements of the City Colleges of Chicago and Mortuary Science program.

Application Deadline is April 7 of every year. New students are accepted into the Mortuary Science program during the spring of each year, with the program starting during the spring term in May and during the fall term in August. Courses are offered Monday through Thursday during the fall enrollment in the day from 8:00 am-3:20 pm; during the spring enrollment in the evening from 4:00-9:50 pm.

Upon acceptance into the Mortuary Science program, students must provide documentation of current health insurance, immunizations and recent medical examination. The student must exemplify professionalism, good communication and language skills and an overall comprehension of public health and sanitation. Some of the required courses have their own prerequisite course. Please see each course descriptions in the college catalog.

#### (continued on next page)

ocus Area: Healthcai

#### (continued from previous page) Choose your courses with your College Advisor. Communications and mathematics pre-degree requirements. Placements based College-level courses that can be taken on COMPASS, ACT or department chair recommendation. while in pre-degree courses. ENGLISH PLACEMENT **READING PLACEMENT** MATHEMATICS PLACEMENT **ELECTIVE COURSES** □ ESL/FS Writing ESL/FS Reading □ FS Mathematics I □ Biology 120 ESL/English 98 ESL/Reading 99 Computer Information Systems 120 FS Mathematics II □ ESL 99 □ ESL Reading 100 Mathematics 98 □ ESL/English 100 □ Reading 125 □ Mathematics 99 SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters. SEMESTER 1 - PREREQUISITES AND GENERAL EDUCATION CATEGORY **ACHIEVEMENTS & NEXT ACTIONS** English 101 – Composition I (3) Program Prerequisite • Biology 121 - Biology I (5) Program Prerequisite • DO THIS - Meet with advisor to discuss academic goals and plan Entrepreneurship 201 – Introduction to Entrepreneurship (3) General Education • coursework Computer Information Systems 120 - Introduction to Microcomputers (3) Program Prerequisite Health Professions 102 - Health Career Studies (3) Program Prerequisite 17 CREDIT HOURS SEMESTER 2 - PREREQUISITES AND GENERAL EDUCATION CATEGORY ACHIEVEMENTS & NEXT ACTIONS D Biology 120 - Terminology for Medical Careers (3) Program Prerequisite • Speech 101 - Fundamentals of Speech Communication (3) Program Prerequisite • DO THIS - Meet with advisor to confirm plans DO THIS – Apply to the Mortuary Science Program Mathematics 118 - General Education Mathematics (4) Program Prerequisite • Biology 226 - Human Structure and Function I (4) Program Prerequisite • 14 CREDIT HOURS SUMMER SEMESTER CATEGORY ACHIEVEMENTS & NEXT ACTIONS Biology 227 – Human Structure and Function II (4) Program Prerequisite **4 CREDIT HOURS SEMESTER 3** CATEGORY ACHIEVEMENTS & NEXT ACTIONS Mortuary Science 102 - Microbiology for Embalmers (3) Required Program Core ۲ Mortuary Science 103 - Chemistry for Embalmers (3) Required Program Core • DO THIS - Meet with advisor to confirm plans Mortuary Science 104 – Pathology for Embalmers (3) Required Program Core ۰ Mortuary Science 111 - History of Funeral Service (3) Required Program Core 12 CREDIT HOURS **SEMESTER 4** CATEGORY ACHIEVEMENTS & NEXT ACTIONS D Mortuary Science 108 - Accounting in Funeral Service (3) Required Program Core Mortuary Science 109 - Sociology for Funeral Service (3) Required Program Core • Mortuary Science 207 - Restorative Art (3) Required Program Core • • Mortuary Science 213 - Embalming Theory I (3) Required Program Core 12 CREDIT HOURS **SEMESTER 5** CATEGORY ACHIEVEMENTS & NEXT ACTIONS D Mortuary Science 203 - Funeral Directing (3) Required Program Core • Mortuary Science 204 - Mortuary and Business Law (3) Required Program Core Mortuary Science 215 - Restorative Art Laboratory (2) Required Program Core DO THIS - Meet with advisor to confirm plans • Mortuary Science 216 - Embalming Theory II (3) Required Program Core • • Biology 130 and Biology 131 - Human Cadaver Anatomy I and II (2) Required Program Core 13 CREDIT HOURS

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ocus Area: Healthcare

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D	SEMESTER 6	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Mortuary Science 210 – Advanced Mortuary Science Practice/Ethics (2)	Required Program Core	
٠	Mortuary Science 211 – Psychology of Funeral Service (3)	Required Program Core	COMPLETION of Associate in Applied Science degree in Mortuary Science
•	Mortuary Science 209 – Funeral Management/Merchandise (3)	Required Program Core	DO THIS – Apply online for degree and graduation
•	Mortuary Science 214 – Embalming Laboratory (3)	Required Program Core	
		11 CREDIT HOURS	
	MINIMUM TOTAL:	83 CREDIT HOURS	



DEGREE CODES: AAS 0239 BC 0403

## **PATHWAY:** Nursing

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students **who are seeking admission into the Nursing program in Fall 2015**. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Basic Nursing Assistant/Health Sciences and an Associate in Applied Science (AAS) Degree in Nursing.

Acceptance into the Nursing Program is competitive and requires an established cumulative GPA at CCC. Nursing prerequisities can be completed at any one of the seven City Colleges of Chicago. Upon admission to the CCC Nursing Program, students will complete the program at one of two campuses, Malcolm X College, or Truman College. Campus preference is not guaranteed, as there are a limited number of available seats at each campus. Any questions regarding application and admissions process please email the CCC Nursing Programs at <u>CCCNursingAdmissions@ccc.edu</u>. In addition, informational sessions are available at Malcolm X, Truman, and Wright College Nursing Programs.

#### Prospective students must apply for admission into the Nursing Program

NURSING PROGRAM ADMISSIONS REQUIREMENTS

All prerequisite courses (4) must be completed prior to the online application deadline of Friday February 6, 2015. Prerequisite courses (4) include:

- Biology 121 with a "C" or higher
- · Chemistry 121 with a "C" or higher
- English 101 with a "C" or higher
- Mathematics 118 or 125 or higher with a "C" or higher

#### Note: Co-requisites (3) to be completed before enrolling into the third semester of nursing program:

- Biology 226 with a "C" or higher
- Biology 227 with a "C" or higher
- Microbiology 233 with a "C" or higher

To be eligible to apply to the CCC Nursing Program, a student must have successfully completed 1) All four prerequisite courses, 2) ATI Pre-admission Exam, 3) Background check, and 4) Cumulative GPA at CCC of 2.75 prior to the posted application February 6, 2015 deadline date. All applications will be reviewed for selection by the Nursing Admission Committee.

PLEASE NOTE: Submitting the application and possessing the requirements for the CCC Nursing Program does not guarantee admission. In addition, indicating campus preferences does not guarantee admission to the campus.

A Note on CNA Fulfillment - Students can choose to fulfill the Certified Nursing Assistant (CNA) requirement at any institution. City Colleges of Chicago (CCC) offers the Health Professions Certificate program as an avenue to obtain a CNA. Please refer to this map for more information.

Before submitting the online application, the online application will request a copy of the applicant's ATI score, date of Certified Background check, prerequisite grades, and CCC CGPA. The applicant will then certify via application submission that the submitted information is NOT false. Falsification of information will result in disqualification for application review. The Nursing Admission Committee will then refer to the respective databases to confirm the submitted information.

#### BACKGROUND CHECK

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo fingerprinting prior to licensing with the state of Illinois. Students should consult with a College Advisor if any of these requirements are a concern.

		(continued from pro	evious p	page)
	Ch	oose your courses with	our Col	lege Advisor.
	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements chair recommendation.		College-level courses that can be taken while in pre-degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT		ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	🗆 Colleg	ge Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II		
□ ESL 99	ESL Reading 100	Mathematics 98		
ESL/English 100	Reading 125	□ Mathematics 99		
SEMES	All plans can be modi	ified to fit the needs of part-	time stud	I FOR FULL-TIME STUDENTS lents by adding more semesters.
SEMES <sup>-</sup>			time stud	
	All plans can be modi SEMESTER 1	ified to fit the needs of part-	time stud RY	lents by adding more semesters.
D	All plans can be modi SEMESTER 1 tion I (3)	ified to fit the needs of part- CATEGO	time stud RY quisite	lents by adding more semesters. ACHIEVEMENTS & NEXT ACTIONS
D • English 101 – Composi	All plans can be modi SEMESTER 1 tion I (3) (5)	ified to fit the needs of part- CATEGO Program Prere	time stud RY quisite quisite	lents by adding more semesters.
D English 101 – Composi Biology 121 – Biology I Chemistry 121 – Basic	All plans can be modi SEMESTER 1 tion I (3) (5) Chemistry I (4) neral Education Mathematics (4)	ified to fit the needs of part- CATEGO Program Prere Program Prere Program Prere	time stud RY quisite quisite quisite	ACHIEVEMENTS & NEXT ACTIONS
D English 101 – Composi Biology 121 – Biology I Chemistry 121 – Basic Mathematics 118 – Ger	All plans can be modi SEMESTER 1 tion I (3) (5) Chemistry I (4) neral Education Mathematics (4)	ified to fit the needs of part- CATEGO Program Prere Program Prere Program Prere	time stud RY quisite quisite quisite quisite	ACHIEVEMENTS & NEXT ACTIONS

Biology 226 – Human Structure and Function I (4)	Program Corequisite	DO THIS – Discuss with advisor when to time application to the
Microbiology 233 – Microbiology (4)	Program Corequisite	Nursing Program
	8 CREDIT HOURS	
SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Nursing 101 – Fundamentals of Nursing I (7)*	Program Corequisite	COMPLETION of Basic Certificate in Basic Nursing Assistant
Biology 227 – Human Structure and Function II (4) *Completes Basic Certificate		SUCCESSFUL completion of Nursing 101 course entitles a person take the certification exam which is necessary to become a Certifier Nursing Assistant (CNA) in the state of Illinois. DO THIS – Discuss with advisor when to time application to the Nursing Program
	11 CREDIT HOURS	
SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Nursing 102 – Fundamentals of Nursing II (7)	Required Program Core	
	7 CREDIT HOURS	
SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Nursing 210 – Nursing Process and Alterations in Homeostasis I (6)	Required Program Core	
Nursing 211 – Nursing Process and Alterations in Homeostasis II (6)	Required Program Core	
	12 CREDIT HOURS	
SEMESTER 6	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Nursing 212 – Nursing Process and Alterations in Homeostasis III (6)	Required Program Core	
Nursing 213 – Nursing Process and Alterations in Homeostasis IV (6)	Required Program Core	COMPLETION of Associate in Applied Science in Nursing DO THIS – Apply online for degree and graduation
Nursing 203 – Nursing in Perspective (3)	Required Program Core	
	15 CREDIT HOURS	
MINIMUM TOTAL:	69 CREDIT HOURS	



DEGREE CODE: BC 0801

### **PATHWAY:** Basic Nursing Assistant

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate in Basic Nursing Assistant. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability.

This Illinois Department of Public Health approved certificate program for Basic Nursing Assistant (BNA) prepares students to work in the health care industry as a Certified Nursing Assistant (CNA). Students will be introduced to the discipline of nursing and the basic approaches to patient care. The role of the CNA as an assistant to the licensed nurse and member of the health care team is studied and practiced in the classroom, laboratory and clinical setting. Upon successful completion of all components of the program, the graduate must pass the State competency exam to become certified as a Nursing Assistant in the State of Illinois.

#### Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• Fundamentals 624 – Nursing Assistant Personnel (5) Required		Required Program Core	COMPLETION of Basic Certificate in Nursing Assistant (Basic)	
•	Clinical 625 – Nursing Assistive Personnel (5)	tive Personnel (5) Required Program Core DO THIS – Meet with advisor to discuss academic		
	MINIMUM TOTAL:	10 CREDIT HOURS		

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BC 0341

### **PATHWAY:** Nursing Home Administration

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in nursing home administration. If pathway is followed as outlined, you will earn a Basic Certificate (BC) in Nursing Home Administration. This does not represent a contract, nor does it guarantee course availability.

The Basic Certificate in Nursing Home Administration addresses the educational needs of managers who will work with the elderly population in health care settings. The program prepares students for employment in long-term care facilities, as well as to sit for the nursing home administrator licensure exam. The program includes both gerontology and business courses based on the requirements of the nursing home administrator's job description. Career possibilities include: Medical and Health Services Managers.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
ENGLISH PLACEMENT	READING PLACEMENT	
ESL/FS Writing	□ ESL/FS Reading	
□ ESL/English 98	□ ESL/Reading 99	
□ ESL 99	□ ESL Reading 100	
□ ESL/English 100	□ Reading 125	

	All plans can be modified to fit the needs of part-time students by adding more semesters.			
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Business 271 – Human Resources Management (3)	Required Program Core		
•	Social Services 102 – Introduction to Gerontology (3)	102 – Introduction to Gerontology (3) Required Program Core		
•	Social Services 252 – Nursing Home Administration (3)	Required Program Core	COMPLETION of Basic Certificate in Nursing Home Administration	
•	Social Services 253 – Accounting for Long Term Care (3)	Required Program Core		
	MINIMUM TOTAL:	12 CREDIT HOURS		
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**D** = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU

Healthcare



DEGREE CODE: AC 0240

## **PATHWAY:** Practical Nursing

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in nursing. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC) in Practical Nursing.

The Advanced Certificate program in Practical Nursing provides students with a basic knowledge of nursing theory and practice. Graduates of the practical nursing program meet the educational requirements for the National Coucil Licensure Examination for Practical Nurses (NCLEX-PN) to become a licensed practical nurse (LPN). Graduates of the program may transfer their credits to an associate or bachelor degree nursing program. If more applicants apply than the program can accept, the most qualified applicants will be accepted.

#### Prospective students must apply for admission into the Practical Nursing Program

PRACTICAL NURSING PROGRAM ADMISSIONS REQUIREMENTS

Requirements for consideration into the program:

- High School Diploma or GED
- Program Application
- Official Transcripts
- Proof of eligibility for college level mathematics by coursework or placement test
- Pre-Admissions Test

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT		
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II		
□ ESL 99	ESL Reading 100	□ Mathematics 98		
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

Biology 120       Contraction Mathematics (d) OR       Mathematics         Mathematics 118 – General Education Mathematics (d) OR       Mathematics         SEMESTER 2       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 150 – Nursing Fundamentals I (4)       Required Program Core         Nursing 151 – Nursing Fundamentals I (4)       Required Program Core         Nursing 152 – Nursing Fundamentals II (4)       Required Program Core         Nursing 152 – Nursing Perspectives (2)       Required Program Core         Biology 226 – Human Structure and Function I (4)       Life Sciences         14 CREDIT HOURS       ACHIEVEMENTS & NEXT ACTIONS         Nursing 153 – Nursing through the Life Span I (5)       Required Program Core         Nursing 154 – Nursing through the Life Span I (6)       Required Program Core         Biology 227 – Human Structure and Function II (4)       Life Sciences         Biology 227 – Human Structure and Function II (4)       Life Sciences         Biology 227 – Human Structure and Function II (4)       Life Sciences         Biology 227 – Human Structure and Function II (4)       Life Sciences         Biology 227 – Human Structure and Function II (6)       Required Program Core         Nursing 155 – Nursing Through the Life Span III (6)       Required Program Core         Nursing 155 – Nursing Through the Life Span III (6)       Required Pr	An plans can be moullieu t	to ne the needs of part-ti	The students by adding more semesters.	
Biology 121 - Biology 1(5)       Life Sciences         Biology 120 - Terminology for Medical Careers (3)       Life Sciences         Mathematics 113 - General Education Mathematics (4) OR       Mathematics         Mathematics 125 Introductory Statistics (4)       IS CREDIT HOURS         SEMESTER 2       CATEGORY         ACHIEVEMENTS & NEXT ACTIONS         Nursing 150 - Nursing Fundamentals I (4)       Required Program Core         Nursing 151 - Nursing Fundamentals II (4)       Required Program Core         Nursing 152 - Nursing Perspectives (2)       Required Program Core         Biology 226 - Human Structure and Function I (4)       Life Sciences         14 CREDIT HOURS       ACHIEVEMENTS & NEXT ACTIONS         Nursing 153 - Nursing through the Life Span I (5)       Required Program Core         Nursing 154 - Nursing through the Life Span I (5)       Required Program Core         Nursing 154 - Nursing through the Life Span II (5)       Required Program Core         Nursing 155 - Nursing Through the Life Span II (6)       Required Program Core         Biology 227 - Human Structure and Function II (4)       Life Sciences         14 CREDIT HOURS       DO THIS - Meet with advisor to confirm plans         Biology 227 - Human Structure and Function II (4)       Life Sciences         14 CREDIT HOURS       COMPLETION of Advanced Certificate in Nursing DO THIS - Nore Ad	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
Biology 120 - Terminology for Medical Careers (3)       Life Sciences         Mathematics 118 - General Education Mathematics (4) OR       Mathematics         Mathematics 125 Introductory Statistics (4)       IS CREDIT HOURS         SEMESTER 2       CATEGORY         ACHIEVEMENTS & NEXT ACTIONS         Nursing 150 - Nursing Fundamentals I (4)       Required Program Core         Nursing 151 - Nursing Fundamentals II (4)       Required Program Core         Nursing 152 - Nursing Perspectives (2)       Required Program Core         Biology 226 - Human Structure and Function I (4)       Life Sciences         14 CREDIT HOURS       ACHIEVEMENTS & NEXT ACTIONS         Nursing 153 - Nursing through the Life Span I (5)       Required Program Core         Nursing 154 - Nursing through the Life Span I (5)       Required Program Core         Nursing 154 - Nursing through the Life Span I (5)       Required Program Core         Biology 227 - Human Structure and Function II (4)       Life Sciences         14 CREDIT HOURS       DO THIS - Meet with advisor to confirm plans         Biology 227 - Human Structure and Function II (6)       Required Program Core         SEMESTER 4       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         SEMESTER 4       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 155 - Nursing Through the Life Span III (6)       Required	English 101 – Composition I (3)	Communications		
Discry TEX       Text Textminingly for finduated valueds (s)       In the declines         Mathematics 118 – General Education Mathematics (4) OR       Mathematics         SEMESTER 2       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 150 – Nursing Fundamentals I (4)       Required Program Core         Nursing 151 – Nursing Fundamentals II (4)       Required Program Core         Nursing 152 – Nursing Perspectives (2)       Required Program Core         Biology 226 – Human Structure and Function I (4)       Life Sciences         14 CREDIT HOURS       ACHIEVEMENTS & NEXT ACTIONS         Nursing 153 – Nursing through the Life Span II (5)       Required Program Core         Nursing 154 – Nursing through the Life Span II (5)       Required Program Core         Do THIS – Meet with advisor to confirm plans       Do THIS – Meet with advisor to confirm plans         Biology 227 – Human Structure and Function II (4)       Life Sciences         14 CREDIT HOURS       Do THIS – Meet with advisor to confirm plans         Biology 227 – Human Structure and Function II (6)       Required Program Core         SEMESTER 4       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 155 – Nursing Through the Life Span III (6)       Required Program Core       Do THIS – Meet with advisor to confirm plans         OTHIS – Propare and register for NCLEX-PN exam DO THIS – Apoly online for the advanced cer	Biology 121 – Biology I (5)	Life Sciences		
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SEMESTER 2       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 150 – Nursing Fundamentals I (4)       Required Program Core         Nursing 151 – Nursing Fundamentals II (4)       Required Program Core         Nursing 152 – Nursing Perspectives (2)       Required Program Core         Biology 226 – Human Structure and Function I (4)       Life Sciences         14 CREDIT HOURS       14 CREDIT HOURS         SEMESTER 3       CATEGORY         ACHIEVEMENTS & NEXT ACTIONS         Nursing 153 – Nursing through the Life Span I (5)       Required Program Core         Nursing 154 – Nursing through the Life Span II (5)       Required Program Core         Biology 227 – Human Structure and Function II (4)       Life Sciences         14 CREDIT HOURS       DO THIS – Meet with advisor to confirm plans         9       SEMESTER 4       CATEGORY         ACHIEVEMENTS & NEXT ACTIONS       14 CREDIT HOURS         9       SEMESTER 4       CATEGORY         14 CREDIT HOURS       COMPLETION of Advanced Certificate in Nursing DO THIS – Prepare and register for NCLEX-PN exam DO THIS – Prepare and register for NCLEX-PN exam DO THIS – Prepare and register for NCLEX-PN exam DO THIS – Prepare and register for NCLEX-PN exam DO THIS – Prepare and register for NCLEX-PN exam DO THIS – If you would like to pursue the RN completion, meet with an adv to discuss the preparation and next steps required		Mathematics		
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SEMESTER 3       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 153 – Nursing through the Life Span I (5)       Required Program Core       DO THIS – Meet with advisor to confirm plans         Nursing 154 – Nursing through the Life Span II (5)       Required Program Core       DO THIS – Meet with advisor to confirm plans         Biology 227 – Human Structure and Function II (4)       Life Sciences       DO THIS – Meet with advisor to confirm plans         I4 CREDIT HOURS         SEMESTER 4       CATEGORY         ACHIEVEMENTS & NEXT ACTIONS         Nursing 155 – Nursing Through the Life Span III (6)       Required Program Core       COMPLETION of Advanced Certificate in Nursing DO THIS – Prepare and register for NCLEX-PN exam DO THIS – Apply online for the advanced certificate DO THIS – If you would like to pursue the RN completion, meet with an adv to discuss the preparation and next steps required	Biology 226 – Human Structure and Function I (4)	Life Sciences		
Nursing 153 – Nursing through the Life Span I (5)       Required Program Core       DO THIS – Meet with advisor to confirm plans         Biology 227 – Human Structure and Function II (4)       Life Sciences       DO THIS – Meet with advisor to confirm plans         SEMESTER 4         COMPLETION of Advanced Certificate in Nursing         Nursing 155 – Nursing Through the Life Span III (6)       Required Program Core       COMPLETION of Advanced Certificate in Nursing         Nursing 155 – Nursing Through the Life Span III (6)       Required Program Core       COMPLETION of Advanced Certificate in Nursing         DO THIS – Prepare and register for NCLEX-PN exam       DO THIS – Apply online for the advanced certificate         DO THIS – If you would like to pursue the RN completion, meet with an advite o discuss the preparation and next steps required         6 CREDIT HOURS		14 CREDIT HOURS		
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Biology 227 – Human Structure and Function II (4)       Life Sciences         I 4 CREDIT HOURS         SEMESTER 4       CATEGORY       ACHIEVEMENTS & NEXT ACTIONS         Nursing 155 – Nursing Through the Life Span III (6)       Required Program Core       COMPLETION of Advanced Certificate in Nursing DO THIS – Prepare and register for NCLEX-PN exam DO THIS – Apply online for the advanced certificate DO THIS – If you would like to pursue the RN completion, meet with an adv to discuss the preparation and next steps required         6 CREDIT HOURS	Nursing 153 – Nursing through the Life Span I (5)	Required Program Core		
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MINIMUM TOTAL: 49 CREDIT HOURS		6 CREDIT HOURS		
	MINIMUM TOTAL:	49 CREDIT HOURS		
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FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU

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AAS 0381 AC 0240

#### **PATHWAY:** Registered Nurse (RN) and Practical Nursing (LPN) Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in nursing. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) in Registered Nurse (RN) Completion and an Advanced Certificate (AC) in Practical Nursing (also known as Licensed Practical Nursing, LPN).

The AAS degree program in RN Completion provides students who have completed the Practical Nursing Program with the nursing coursework that will result in an Associate in Applied Science degree in Nursing. This is a ladder program designed to provide an opportunity for Practical Nursing graduates to continue their education by building on their previous education rather than repeating previously learned material. The AAS degree in Nursing program prepares students to become registered nurses (RN's) through licensure from the Illinois Department of Financial and Professional Regulation (IDFPR), and meets critical local, state, and national needs for nursing professionals. Successful completion of the program will allow the student to apply to sit for the National Coucil Licensure Examination for Practical Nurses (NCLEX-PN).

#### Prospective students must apply for admission into the Practical Nursing Program

#### PRACTICAL NURSING PROGRAM ADMISSIONS REQUIREMENTS

Admission is competitive. The District has one admission policy for all the City Colleges of Chicago RN Programs. Students seeking admission must first successfully complete the entire program of study to become a practical nurse (PN). What makes the RN Completion program unique is that students seeking admission into the program are not required to take the NCLEX-PN Licensure Examination.

Note: Effective fall 2012, City Colleges of Chicago updated its Associate Degree Nursing (ADN) program application process in an effort to create a more efficient and seamless system. All new applicants to the CCC Nursing Programs will apply via a centralized online application at: <a href="http://apps.ccc.edu/Nursing2012/index.aspx">http://apps.ccc.edu/Nursing2012/index.aspx</a>

The online application process will streamline the admission process and allow prospective students to apply by submitting one single application which will be reviewed by the CCC Nursing Program Admissions Committee. However, receiving and completing the application for a Nursing program does not guarantee admission. In addition, indicating the college preference choices also does not guarantee admission.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES		
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	College Success		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	□ Biology 120		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	□ Reading 125	□ Mathematics 99			

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

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D AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	English 101 – Composition I (3)	Program Prerequisite		
• •	Biology 121 – Biology I (5)	Program Prerequisite	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
• •	Biology 120 – Terminology for Medical Careers (3)	Life Sciences	Note: Biology 120 is not required for the RN program but is required for the LPN	
• •	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Program Prerequisite	program	
		15 CREDIT HOURS		
D AC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	Nursing 150 – Nursing Fundamentals I (4)	Required Program Core		
• •	Nursing 151 – Nursing Fundamentals II (4)	Required Program Core		
• •	Nursing 152 – Nursing Perspectives (2)	Required Program Core	DO THIS – Begin Nursing AC-LPN Program required program core	
		noquirou i rogiuni ooro	DO THIS – Decide date to apply to the RN-Completion Program	
• •	Biology 226 – Human Structure and Function I (4)	Life Sciences	DO THIS – Decide date to apply to the RN-Completion Program	
•••		, ,	DO THIS – Decide date to apply to the RN-Completion Program	
•••	Biology 226 – Human Structure and Function I (4)	Life Sciences	DO THIS – Decide date to apply to the RN-Completion Program	

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DAC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Nursing 153 – Nursing through the Life Span I (5)	Required Program Core	
• •	Nursing 154 – Nursing through the Life Span II (5)	Required Program Core	<b>RN COMPLETION</b> only applies three of the six Nursing 150, 151, 152, 153, 154, 155, 156 courses, but the LPN program requires all of them
• •	Biology 227 – Human Structure and Function II (4)	Life Sciences	
••	Chemistry 121 – Basic Chemistry (4) <b>OR</b> Chemistry 201 – General Chemistry I (5)	Life Sciences	Although course prerequisites require a grade of "C" or higher, Chemistry 121 (instead of Chemistry 201) will require a "B" or higher
		18-19 CREDIT HOURS	
D AC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Nursing 155 – Nursing Through the Life Span III (6)	Required Program Core	
			COMPLETION of Advanced Certificate in Nursing, Licensed Practical Nurse DO THIS – Apply online for the advanced certificate
••	Speech 101 – Fundamentals of Speech Communication (3)	Communications	DO THIS – Prepare and register for NCLEX-PN exam
		12 CREDIT HOURS	
D AC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
••	Nursing 210 – Nursing Process and Alterations in Homeostasis I (6)	Required Program Core	
••	Nursing 211 – Nursing Process and Alterations in Homeostasis II (6)	Required Program Core	
		12 CREDIT HOURS	
D AC	SEMESTER 6	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Nursing 212 – Process and Alterations in	Paguirad Program Cara	
• •	Homeostasis III (6)	Required Program Core	COMPLETION of Associate in Applied Science in Nursing – Registered Nurse (RN
••		Required Program Core	COMPLETION of Associate in Applied Science in Nursing – Registered Nurse (RN DO THIS – Meet with advisor to confirm plans DO THIS – Apply online for degree and graduation
•••	Homeostasis III (6) Nursing 213 – Integration of Concepts of Complex		DO THIS – Meet with advisor to confirm plans
•••	Homeostasis III (6) Nursing 213 – Integration of Concepts of Complex Nursing IV (6)	Required Program Core	



AAS 0259

## **PATHWAY:** Occupational Therapy Assistant

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in occupational therapy. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science Degree (AAS) in Occupational Therapy Assistant (OTA). **One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.** 

The Associate in Applied Science degree program in Occupational Therapy Assistant is the study of occupational therapy as a skilled healthcare service that uses occupation to promote meaningful living. Occupational therapy assistants, under the guidance of occupational therapists, adapt activities, tasks, and the environment in order to enable people of all ages and backgrounds to fulfill their chosen occupations and life roles. Career options can include employment in hospitals, clinics, schools, specialized community care settings, and wellness programs. The program's mission is to prepare competent and effective occupational therapy practitioners who value occupation as both a means and as an end to quality living for self and others through a sound educational experience that includes preparation in:

- The occupational therapy process
- The impact of culture
- Use of self as an agent of change
- Ethical professional practice
- Teaching and learning processes
- Collaborating as a healthcare professional
- Working in a variety of practice environments
- Oral and written communication skills

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education. Graduates of the program are eligible to sit for the National Certification Exam for Occupational Therapy Assistants administered by the National Board for Certification in Occupational Therapy, Inc. (NBCOT). After successful completion of this exam, an individual becomes a Certified Occupational Therapy Assistant. Determination of exam eligibility for applicants who have a felony related charge or conviction requires individualized review by NBCOT, Inc. Most states require licensure in order to practice. Illinois license issuance is based upon the results of the NBCOT Certification exam.

#### Prospective students must apply for admission into the Nursing Program

#### ADMISSIONS REQUIREMENTS

Students can make formal application to the program when all pre-admission coursework is completed, or when pre-admission coursework completion will occur before the beginning of Semester I of the program. A minimum grade of "C" is required in each pre-admission and general education course. If more candidates apply than the program can accept, the best qualified will be admitted.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		College-level courses that can be taken while in pre-degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES	
<ul> <li>ESL/FS Writing</li> <li>ESL/English 98</li> <li>ESL 99</li> <li>ESL/English 100</li> </ul>	<ul> <li>ESL/FS Reading</li> <li>ESL/Reading 99</li> <li>ESL Reading 100</li> <li>Reading 125</li> </ul>	<ul> <li>FS Mathematics I</li> <li>FS Mathematics II</li> <li>Mathematics 98</li> <li>Mathematics 99</li> </ul>	College Success	

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

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D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Occupational Therapy Assistant 106 – Foundations of Human Occupation (3)	Program Prerequisite	
•	English 101 – Composition I (3)	Program Prerequisite	
•	Biology 121 – Biology I (5)	Program Prerequisite	DO THIS – Meet with advisor to discuss academic goals and plan coursework
•	Computer Information Systems 120 – Introduction to Microcomputers (3)	Program Prerequisite	
•	Psychology 201 – General Psychology (3)	Program Prerequisite	
		17 CREDIT HOURS	

## Healthcare

#### (continued from previous page)

	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Biology 226 – Human Structure and Function I (4)	Program Prerequisite	
	Sociology 201 – Introduction to the Study of Society (3)	Program Prerequisite	
	Psychology 207 – Child Psychology (3) OR Child Development 101 (3)	Program Prerequisite	DO THIS – Apply to the Occupational Therapy Assistant
	Social Service 222 – Adult Development and Aging (3) <b>OR</b> Social Service 102 – Introduction to Gerontology (3) <b>OR</b> Child Development 102 (in semester 3) – Human Growth and Development II (3)	Program Elective	- Program
		13 CREDIT HOURS	
	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Occupational Therapy Assistant 107 – Occupations of Childhood (5)	Required Program Core	
	Occupational Therapy Assistant 108 – Practice Skills for the Occupational Therapy Assistant I (2)	Required Program Core	DO THIS – Meet with advisor to confirm plans
	Biology 227 – Human Structure and Function II (4)	Program Prerequisite	
		11 CREDIT HOURS	
j	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Occupational Therapy Assistant 109 – Occupations of Adolescence and Early Adulthood (5)	Required Program Core	
	Occupational Therapy Assistant 110 – Practice Skills for the Occupational Therapy Assistant II (2)	Required Program Core	
		7 CREDIT HOURS	
	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Occupational Therapy Assistant 209 – Occupations of Middle Adulthood (5)	Required Program Core	
	Occupational Therapy Assistant 210 – Practice Skills for the Occupational Therapy Assistant III (2)	Required Program Core	
	Occupational Therapy Assistant 211 – Special Topics for the Occupational Therapy Assistant 1 (3)	Required Program Core	
		10 CREDIT HOURS	
	SEMESTER 6	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Occupational Therapy Assistant 212 – Occupations of Later Adulthood (5)	Required Program Core	
	Occupational Therapy Assistant 213 $-$ Practice Skills for the Occupational Therapy Assistant IV (2)	Required Program Core	DO THIS – Meet with advisor to confirm plans
	Occupational Therapy Assistant 214 – Special Topics for the Occupational Therapy Assistant II (3)	Required Program Core	
		10 CREDIT HOURS	
	SEMESTER 7 - SUMMER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Occupational Therapy Assistant 215 – Fieldwork Level 2A/Professional Seminar (6)	Required Program Core	All academic coursework must be completed and ar exit exam passed in order for students to proceed to
	Occupational Therapy Assistant 216 – Fieldwork Level 2B/Professional Seminar (6)	Required Program Core	fieldwork component of the program. COMPLETION of Associate in Applied Science Degree Occupational Therapy Assistant DO THIS – Prepare to take the National Certification Exa for Occupational Therapy Assistants DO THIS – Apply online for degree
		12 CREDIT HOURS	
é	MINIMUM TOTAL:	80 CREDIT HOURS	

Focus Area: Healthcare



BC 0397

## **PATHWAY:** Personal Fitness Trainer

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a certificate in personal fitness training. If pathway is followed as outlined, student will earn a Basic Certificate (BC) in Personal Fitness Trainer. This does not represent a contract, nor does it quarantee course availability.

The courses listed below will allow you to earn a Basic Certificate from the City Colleges of Chicago. The Basic Certificate program provides students with the educational background required for pursuing a career in the health and fitness industry. The curriculum provides the basic foundational skills needed to assess human body mechanics and the ability to develop and implement exercise training programs designed to improve and maintain health-related components of fitness and performance. This knowledge will prepare students to achieve personal trainer certification from the National Academy of Sports Medicine (NASM). Employment opportunities with this certification include personal trainer, group exercise instructor, and/or entry-level positions available at corporate or community fitness centers (i.e. health clubs, hospital fitness centers, YMCA, community recreational centers, etc.).

#### Prospective students must apply for admission into the Personal Trainer Program

PERSONAL TRAINER PROGRAM ADMISSIONS REQUIREMENTS

- Official high school transcript or GED certificate showing date of graduation or completion
- 2.0 GPA
- College reading skills as determined by one or more of the following: MXC Reading/Comprehension Placement test (E.g. COMPASS); Grade of "C" or better in English 100.
- Complete the application packet
- Submit program application packet to the Personal Trainer Program director at MXC prior to the application deadline (Spring Semester; See Website for Exact Application Deadline)\*

#### BACKGROUND CHECK

A background check may be required; it is dependent upon the location where the students' practicum is performed. Students that meet all of the minimum admission requirements listed above will be scheduled for an interview with the program director. Students that complete this interview will be considered for admission to the program. Please note that admission is highly competitive and that not all students who are interviewed will be admitted. Students are advised to prepare for the interview, to arrive early, and to dress appropriately for a professional interview. Students are also advised to carefully prepare their application, giving special attention to content and format.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				
ENGLISH PLACEMENT	READING PLACEMENT	ELECTIVE COURSES		
□ ESL/FS Writing	□ ESL/FS Reading	□ College Success		
□ ESL/English 98	ESL/Reading 99			
□ ESL 99	ESL Reading 100			
□ ESL/English 100	□ Reading 125			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
٠	Exercise Science Sports Studies 101 – Trainer Certification Prep Class (4)	Required Program Core	DO THE Drapara for the partification arom		
•	Health Professions 102 – Health Career Studies (3)	Required Program Core			
•	English 101 – Composition I (3)	Required Program Core	DO THIS – Prepare for the certification exam		
٠	Entrepreneurship 201 – Introduction to Entrepreneurship (3)	Required Program Core			
		13 CREDIT HOURS			
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	Exercise Science Sports Studies 102 – Personal Exercise Trainer Practicum (4)	Required Program Core	COMPLETION of Basic Certificate in Personal Fitness Trainer		
		4 CREDIT HOURS			
	MINIMUM TOTAL:	17 CREDIT HOURS			
D	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 04 (14) (14) (14) (14) (14) (14) (14) (14				

Healthcare



DEGREE CODE: AC 0254

## **PATHWAY:** Pharmacy Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Pharmacy Technology. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC) in Pharmacy Technology.

Pharmacy technicians assist and support licensed pharmacists in providing health care and medications to patients. They may perform many of the same duties as pharmacists, but all technicians' work must be checked by a pharmacist before medication is dispensed. While Pharmacy Technicians can work everywhere pharmacists work, some state laws may limit the duties they perform.

A special application is required for entry into the program. Upon acceptance into the program, students must provide proof of current health insurance and recent medical examination.

#### Prospective students must apply for admission into the Pharmacy Technology Program

PHARMACY TECHNOLOGY PROGRAM ADMISSIONS REQUIREMENTS

#### No conviction of felony crime

- Submit a completed application to the Pharmacy Technology program before June 1 for fall semester admission only
- Provide official high school transcripts or GED certificate showing date of graduation as well as official transcripts of all college courses taken by applicant
- Provide official results of the College placement examination indicating college level scores in Mathematics, English, and reading comprehension
- Submit three letters of recommendation either from former teachers, employers, counselors or ministers to the Pharmacy Technology office, Room 3524
- · Personal interview with members of the program's admissions committee

#### For more information on the Pharmacy Technology Program, please call (312) 850-7385

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT		
ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II		
□ ESL 99	ESL Reading 100	□ Mathematics 98		
□ ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Pharmacy Technology 102 – Basic Science for Allied Health (4)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
•	Pharmacy Technology 103 – Introdution to Pharmacy Technology (4)	Required Program Core	
•	Pharmacy Technology 104 – Pharmaceutical Calculations (3)	Required Program Core	
•	Pharmacy Technology 201 – Introduction to Pharmacy Law (1)	Required Program Core	
•	Pharmacy Technology 204 – Clinical Practicum I (4)	Required Program Core	
		16 CREDIT HOURS	
AC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Pharmacy Technology 101 – Pharmacology for Allied Health (4)	Required Program Core	<b>COMPLETION</b> of Advanced Certificate in Pharmacy Technology <b>DO THIS</b> – Apply online for advanced certificate <b>DO THIS</b> – Illinois Department of Financial and Professional Regulation (\$40.00 license) and Pharmacy Technician Certification Board (\$129.00 test).
•	Pharmacy Technology 113 – Prescription Processing (2)	Required Program Core	
•	Pharmacy Technology 121 – Pharmacy Communication (3)	Required Program Core	
•	Pharmacy Technology 202 – Pharmacy Operations (4)	Required Program Core	
•	Pharmacy Technology 205 – Clinical Practicum II (4)	Required Program Core	
		17 CREDIT HOURS	
	MINIMUM TOTAL:	<b>33 CREDIT HOURS</b>	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (MX) (DA)

106

**D** = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU



BC 0219

## **PATHWAY:** Phlebotomy

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Phlebotomy. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Phlebotomy.

The Basic Certificate program in Phlebotomy leads to certification through the National Phlebotomy Association (NPA), the American Society of Clinical Pathologists (ASCP), and the American Society of Phlebotomy Technicians (ASPT).

The phlebotomist is an entry level health care worker who serves as the direct link between the patient and the laboratory. The position is responsible for drawing both venous and arterial blood specimens from patients and sending blood to the laboratory. In some cases, physician approval is required. The laboratory technologist relies on the integrity and accuracy of the phlebotomist in procuring the proper specimens; accurate diagnosis of a patient's condition can depend on quality work. Phlebotomists can further their education and become laboratory technologists.

#### Prospective students must apply for admission into the Phlebotomy Program

PHLEBOTOMY PROGRAM ADMISSIONS REQUIREMENTS

- Submit a complete application to the Phlebotomy program
  - Provide an official high school transcript or GED certificate showing date of graduation or completion
- College reading skills as determined by one or more of the following: MXC Reading/Comprehension Placement test (E.g. COMPASS); Grade of "C" or better in English 100

Students that meet all of the minimum admission requirements listed above will be considered by the program director for admission into the Phlebotomy program. Please note that admission is highly competitive and that not all students who meet these minimum requirements will be admitted. Students are advised to carefully prepare their application, giving special attention to content and format. Applications for the program are accepted from March through July. The program begins each fall. For more information on the Phlebotomy program, call (312) 850-7383 or 7354. The application can be found here: <a href="https://cc.edu/colleges/malcolm-x/departments/Documents/Phlebotomy\_Application.pdf">cc.edu/colleges/malcolm-x/departments/Documents/Phlebotomy\_Application.pdf</a>

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
ENGLISH PLACEMENT	READING PLACEMENT	
ESL/FS Writing	ESL/FS Reading	
ESL/English 98	ESL/Reading 99	
ESL 99	ESL Reading 100	
ESL/English 100	□ Reading 125	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

All plans can be modified to fit the needs of part-time students by adding more semesters.
SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT AC

БС	SEIVIESTEK I	CATEGORY	ACHIEVEIVIENTS & NEXT ACTIONS
•	Phlebotomy 109 – Phlebotomy Practicum and Seminar I (5)	Required Program Core	
		5 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Phlebotomy 209 – Phlebotomy Practicum and Seminar II (6)	Required Program Core	COMPLETION of Basic Certificate in Phlebotomy
	6 CREDIT HOURS		
	MINIMUM TOTAL:	11 CREDIT HOURS	
D	= DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC C	ERTIFICATE	Programs offered at: DA (KK (NX) (OH) (TR) (HW) (WR)

Healthcare



DEGREE CODE: BC 0866\* \*PENDING APPROVAL

## **PATHWAY:** Accelerated Phlebotomy

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Accelerated Phlebotomy. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability.

The Accelerated Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis in a seven month timeframe. Course work includes proper specimen collection and handling, communication skills, health and safety, anatomy and physiology and medical terminology. Students successfully completing the program may qualify for employment in hospitals, clinics, physician's offices, and other healthcare settings. Successful completers will be eligible for national certification as Phlebotomy Technicians through the American Society of Clinical Pathologists (ASCP).

Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Health 139 – Fundamentals of Phlebotomy (3)	Required Program Core		
• Health 140 – Phlebotomy Practice and Procedure (3)		Required Program Core	COMPLETION of Basic Certificate in Phlebotomy (Accelerated) DO THIS – Meet with advisor to discuss academic goals and plan coursework	
٠	Health 141 – Phlebotomy Clinical Practice (9)	Required Program Core		
	MINIMUM TOTAL:	15 CREDIT HOURS		
D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (WK) (DH) (TB) (WK) (WB)				

Focus Area: Hadthcare

DEGREE CODE: BC 0803

## **PATHWAY:** Phlebotomy Technician

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in becoming a Phlebotomy Technician. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Phlebotomy Technician. It does not represent a contract, nor does it guarantee course availability.

The Phlebotomy Technician 90-hour program prepares professionals to collect blood specimens for laboratory analysis. Students will become familiar with all aspects of blood collection and will develop comprehensive skills to perform venipuncture completely and safely. Classroom and lab work includes terminology, anatomy and physiology, blood collection procedures, specimen hands-on practice, and training in skills and techniques to perform puncture methods. As part of the learning objectives for the coursework, students will take on the role of patient and technician. Also, the coursework includes extensive hands-on laboratory and preparation for the national certification.

ADMISSIONS REQUIREMENTS

Be at least 18 years of age

A high school diploma or GED certificate is required for national certification

#### Choose your courses with your College Advisor.

	SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.		
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Health 102 – Phlebotomy Technician (12)	Required Program Core	<b>COMPLETION</b> of Basic Certificate in Phlebotomy Technician <b>DO THIS</b> – Meet with Advisor to discuss academic goals and plan coursework
	MINIMUM TOTAL:	12 CREDIT HOURS	
D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (a) (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b			



AAS 0246

## **PATHWAY:** Radiography

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Radiography. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Radiography.

The study of the theory, technical skills, patient care, and techniques necessary to use radiation in the diagnosis of disease can lead to employment as an X-ray technologist or radiographer in private and public hospitals, clinics, and laboratories. The Associate in Applied Science degree in Radiography provides the necessary professional skills, progressive maturity, and the intellectual, social, and emotional values necessary for a graduate to be a trustworthy member of a healthcare team.

Upon completion of the program of study, graduates become eligible to take the national certification exam offered by the American Registry of Radiologic Technologists (ARRT). In addition, graduates may apply for a license from the Illinois Emergency Management Agency/Division of Nuclear Safety.

Malcolm X College and Wright College have different required program course sequences. While the courses below illustrate what needs to be taken, the order will differ depending on college of admittance. Please speak with an advisor or the Radiography Program Director if you are considering applying to the program.

#### Prospective students must apply for admission into the Radiography Program

#### RADIOGRAPHY PROGRAM ADMISSIONS REQUIREMENTS

The program is offered at Malcolm X College and Wilbur Wright College. Malcolm X College's program begins in the summer and Wilbur Wright College's program begins in the fall. Malcolm X College's admission applications are accepted February 1 through April 1 of each year for admittance in the program the summer of the same year. Wilbur Wright College's admission applications are accepted through December 1st of each year for admittance in the program the following fall.

The program is very competitive, and having the minimum requirements does not indicate that you will be accepted into the program. Students having less than minimum requirements will not be considered. In order to enter the program students must:

- 18 years of age or older.
- Official high school transcript or GED certificate showing date of graduation or completion.
- Official college transcripts.
- 2.5 College GPA.
- Grade of "C" or better in Mathematics 118 or higher and Health Professions 102 Health Care Studies.
- Complete the application packet.
- Submit program application packet to the Radiography Program director at Malcolm X College or Wilbur Wright College prior to the application deadline (See website for exact application deadline)\*.

Students that meet all of the minimum admission requirements listed above will be scheduled for an interview with the program director. Students that complete this interview will be considered for admission to the program. Please note that admission is highly competitive and that not all students who are interviewed will be admitted. Students are advised to prepare for the interview, to arrive early, and to dress appropriately for a professional interview. Students are also advised to carefully prepare their application, giving special attention to content and format.

#### BACKGROUND CHECK

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo fingerprinting prior to licensing with the state of Illinois. Students should consult with an advisor if any of these requirements are a concern.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.	
ENGLISH PL	ACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writ	ing	□ ESL/FS Reading	□ FS Mathematics I	Biology 120
□ ESL/English	98	ESL/Reading 99	□ FS Mathematics II	□ Computer Information Information Systems 120
□ ESL 99		ESL Reading 100	□ Mathematics 98	
ESL/English	100	□ Reading 125	□ Mathematics 99	

## Healthcare

## (continued from previous page)

SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
English 101 – Composition I (3)	Communications	
Mathematics 118 General Education Mathematics (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss academic goals and plan coursework
Biology 121 Biology I (5) <b>OR</b> Biology 114 – General Education	Dragram Dragoujaita	*Note: In the Prerequisite Semesters: Wright College requires completion of Biolo
Biology (4) <b>OR</b> Biology 115 – Human Biology (4)*	Program Prerequisite	227 before entrance into the program, and requires Biology 120 and Biology
Health Professions 102 – Health Career Studies (3) <b>OR</b> Biology 120 – Terminology for Medical Careers (3)*	Program Prerequisite	Malcolm X College requires Health Professions 102.
	14-15 CREDIT HOURS	
SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Biology 226 – Human Structure and Function I (4)	Life Sciences	
General Education course (3)	General Education	DO THIS – Apply to the Radiography Program
Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
	10 CREDIT HOURS	
SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Radiography 101 – Introduction to the Radiation Sciences (2)*	Program Prerequisite	
Biology 227 – Human Structure and Function II (4)	Life Sciences	
	6 CREDIT HOURS	
SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Radiography 115 – Basic Principles of Image Production (3)	Required Program Core	
Radiography 124 – Introduction to Patient Care (2)	Required Program Core	
Radiography 131 – Radiographic Procedures I (2)	Required Program Core	DO THIS – Meet with advisor to confirm plans
Radiography 140 – Introduction to Clinical Education (4)	Required Program Core	
Radiography 208 – Radiobiology (3)	Required Program Core	
	14 CREDIT HOURS	
SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Radiography 102 – Attitudes in Patient Care (2)	Required Program Core	
Radiography 105 – Imaging Physics (3)	Required Program Core	
Radiography 128 – Image Evaluation (1)	Required Program Core	
Radiography 141 – Radiography Clinical Education I (4)	Required Program Core	
	10 CREDIT HOURS	
SEMESTER 6	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Radiography 242 – Radiography Clinical Education II (4)	Required Program Core	DO THIS – Meet with advisor to confirm plans
Radiography 232 – Radiographic Procedures (4)	Required Program Core	
	8 CREDIT HOURS	
SEMESTER 7	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Radiography 205 – Applied Radiographic Techniques (3)	Required Program Core	
Radiography 233 – Radiographic Procedures III (4)	Required Program Core	
Radiography 234 – Special Radiographic Procedures (2)	Required Program Core	
Radiography 243 – Radiography Clinical Education III (4)	Required Program Core	
	13 CREDIT HOURS	
SEMESTER 8	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Radiography 200 – Pathology (3)	Required Program Core	COMPLETION of Associate in Applied Science Degree in Radiography
Radiography 202 – Radiology Management (1)	Required Program Core	DO THIS – Prepare for the American Registry of Radiologic Technologists (ARRT) DO THIS – Apply for a license from the Illinois Emergency Management Agency
Radiography 206 – Imaging (2)	Required Program Core	Division of Nuclear Safety
Radiography 244 – Radiography Clinical Education IV (5)	Required Program Core	DO THIS – Apply online for degree and graduation
	11 CREDIT HOURS	
MINIMUM TOTAL:	86 CREDIT HOURS	

**D** = DEGREE // **AC** = ADVANCED CERTIFICATE // **BC** = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT **CCC.EDU** 

PROGRAMS OF STUDY Healthcare



AC 0248

## **PATHWAY:** Renal Dialysis Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Renal Dialysis Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC). The Advanced Certificate program Renal Dialysis Technology leads to certification through the Board of Nephrology Examiners Nursing and Technology. It prepares students for employment as Dialysis Technicians or Nephrology Technologists. They perform treatment and services to patients with end stage renal disease and/or dysfunction.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
ENGLISH PLACEMENT	READING PLACEMENT	
ESL/FS Writing	□ ESL/FS Reading	
ESL/English 98	ESL/Reading 99	
□ ESL 99	ESL Reading 100	
ESL/English 100	□ Reading 125	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Biology 116 – Anatomy and Physiology (4)	Required Program Core	
•	Renal Technology/Nephrology 101 – Introduction to Health Care Field and Nephrology (3)	Required Program Core	
•	Renal Technology/Nephrology 102 – Basic Hemodialysis Principles I (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Renal Technology/Nephrology 103 – Basic Hemodialysis Principles II (3)	Required Program Core	
•	Renal Technology/Nephrology 108 – Clinical Experience I (3)	Required Program Core	
		16 CREDIT HOURS	
AC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Health Professions 101 – Patient Care Technician Training (6)	Required Program Core	
•	Renal Technology/Nephrology 106 – Diagnostic Tests and Procedures in Nephrology (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Renal Technology/Nephrology 202 – Renal Disease and Pathophysiology (3)	Required Program Core	
•	Renal Technology/Nephrology 109 – Clinical Experience II (4)	Required Program Core	
		16 CREDIT HOURS	
AC	SUMMER SEMESTER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Renal Technology/Nephrology 203 – Clinical Experience III (4)	Required Program Core	DO THIS – Mid-term check-in with advisor COMPLETION of Advanced Certificate in Renal Dialysis Technology DO THIS – Apply online for degree, and for graduation
		4 CREDIT HOURS	

Healthcare



AAS 0234

## **PATHWAY:** Respiratory Care

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Respiratory Care. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science Degree (AAS) in Respiratory Care.

The Associate in Applied Science in Respiratory Care will offer the study of theory and techniques instrumental in diagnosis, treatment, management, and preventive care of patients with cardiopulmonary problems. It will prepare the students to become a well-rounded professional and competent advanced respiratory therapist. The graduate will be eligible to take the National Board for Respiratory Care entry-level respiratory care practitioner examination to become a "Certified Respiratory Therapist" and the advanced level respiratory care practitioner examination to become a "Registered Respiratory Therapist." Successful completion of the program can lead to employment as a respiratory therapist in hospitals, clinics or home settings or branch off into research, sales, education or other career opportunities.

#### Prospective students must apply for admission into the Respiratory Care Program

PHARMACY TECHNOLOGY PROGRAM ADMISSIONS REQUIREMENTS

- 18 years of age or older
- Official high school transcript or GED certificate showing date of graduation or completion
- Official college transcripts
- 2.5 College GPA
- Grade of "C" or better in English 101 or higher, Mathematics 118 or higher, Chemistry 121, and Biology 116 OR Biology 226 and 227
- Complete the application packet
- Submit program application packet to the Respiratory Care Program director at Malcolm X College or Wilbur Wright College prior to the application deadline (See website for exact application deadline)\*.

\*Note: Students enrolled in prerequisite courses in current semester are eligible to apply to the Respiratory Care program, provided they can demonstrate a course grade of "C" or better. However, admission cannot be granted until all requirements are complete. Students that meet all of the minimum admission requirements listed above will be scheduled for an interview with the program admission committee. Students that complete this interview will be considered for admission to the program. Please note that admission is highly competitive and that not all students who are interviewed will be admitted. Students are advised to prepare for the interview, to arrive early, and to dress appropriately for a professional interview. Students are also advised to carefully prepare their application, giving special attention to content and format.

#### BACKGROUND CHECK

Students entering most healthcare professions programs will be required to present documentation of health history and vaccination status, to undergo annual tuberculosis screening, to submit to a background check, to submit to initial and random drug screening, and to undergo fingerprinting prior to licensing with the state of Illinois. Students should consult with an advisor if any of these requirements are a concern.

### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT		
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II		
□ ESL 99	□ ESL Reading 100	□ Mathematics 98		
□ ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	English 101 – Composition I (3)	Communications	
•	Mathematics 118 – General Education Mathematics (4)	Mathematics/Science	DO THIS – Meet with Advisor to discuss academic goals
•	Chemistry 121 – Basic Chemistry (4)	Program Prerequisite	and plan coursework DO THIS – Apply to the Respiratory Care Program
•	Biology 116 – Anatomy and Physiology (4) <b>OR</b> Biology 226 – Human Structure and Function I (4) <b>WITH</b> Biology 227 – Human Structure and Function II (4) next semester	Program Prerequisite	
		15 CREDIT HOURS	

## PROGRAMS OF STUDY Healthcare

### (continued from previous page)

SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Physics 131 – Mechanics and Power (3)	Physical Sciences	
Humanities/Fine Arts course (3)	Humanities/Fine Arts	DO THIS – Meet with advisor to confirm plans
Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	-
	9 CREDIT HOURS	
SEMESTER 3 - FALL I	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Respiratory Therapy 114 – Basic Respiratory Care (4)	Required Program Core	
Respiratory Therapy 115 – Cardiopulmonary/Renal Anatomy and Physiology (3)	Required Program Core	
Respiratory Therapy 116 – Patient Assessment (2)	Required Program Core	
Respiratory Therapy 117 – Respiratory Pharmacology (1)	Required Program Core	
Respiratory Therapy 118 – Respiratory Microbiology (2)	Required Program Core	
Respiratory Therapy 119 – Respiratory Care Laboratoratory I (3)	Required Program Core	
	12 CREDIT HOURS	
SEMESTER 4 - SPRING I	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Respiratory Therapy 127 – Clinical Practice I (3)	Required Program Core	
Respiratory Therapy 137 – Advanced Pathology and Clinical Application (3)	Required Program Core	
Respiratory Therapy 139 – Respiratory Care Laboratory II (2)	Required Program Core	
Respiratory Therapy 141 – Ventilatory Mechanics I (3)	Required Program Core	
	11 CREDIT HOURS	
SEMESTER 5 - SUMMER I	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Respiratory Therapy 129 – Clinical Practice II (3)	Required Program Core	
Respiratory Therapy 146 – Ventilatory Mechanics II (3)	Required Program Core	
	6 CREDIT HOURS	
SEMESTER 6 - FALL II	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Respiratory Therapy 200 – Respiratory Care Laboratory III (2)	Required Program Core	
Respiratory Therapy 222 – Clinical Practice III (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
Respiratory Therapy 225 – Age Specific Care (3)	Required Program Core	
Respiratory Therapy 227 – Critical Care Services (4)	Required Program Core	
	12 CREDIT HOURS	
SEMESTER 7 - SPRING II	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Respiratory Therapy 224 – Clinical Practice IV (4)	Required Program Core	
Respiratory Therapy 230 – Advanced Cardiopulmonary Monitoring (3)	Required Program Core	COMPLETION of Associate in Applied Science degree Respiratory Care
Respiratory Therapy 250 – Cardiopulmonary Rehab Home Care (1)	Required Program Core	DO THIS – Apply online for degree and graduation
Respiratory Therapy 260 – Advanced Specialty Topics (3)	Required Program Core	
	11 CREDIT HOURS	
MINIMUM TOTAL:	: 79 CREDIT HOURS	

Healthcare



DEGREE CODE: BC 0269

## **PATHWAY: Sterile Processing Clinical**

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in sterile processing. This does not represent a contract, nor does it guarantee course availability. If pathway is followed as outlined, you will earn a Basic Certificate (BC) in Sterile Processing Clinical.

The Basic Certificate program in Sterile Processing Clinical presents the basic concepts and principles for developing skills and competencies required for infection prevention and control in the sterile processing department in a health care facility. The program offers basic knowledge related to instrumentation connected with surgical procedures. Students will be involved in processes such as cleaning, disinfecting, decontamination, sterilization, standard precautions, and universal precautions, as well as gain basic knowledge concerning various types of central service equipment such as ultrasonic cleaning, washer sterilizers, cart washers, autoclaves, steris, sterrad and ethylene oxide (ETO) machines.

**Note:** Graduates are eligible to write the International Association of Healthcare Central Service Material Management Examination (IAHCSMM).

#### Prospective students must apply for admission into the Sterile Processing Clinical Program

STERILE PROCESSING CLINICAL PROGRAM ADMISSIONS REQUIREMENTS

- Consent of Program Director
- Submit an application and interview with the Program Director/Program Personnel
- Co-enroll in Sterile Processing 216 and 217
- Prerequisite for Sterile Processing 217 is a "C" or better in 216
- English 101 Composition I recommended before the Surgical Technology courses

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
ENGLISH PLACEMENT	READING PLACEMENT	
□ ESL/FS Writing	□ ESL/FS Reading	
ESL/English 98	□ ESL/Reading 99	
□ ESL 99	□ ESL Reading 100	
ESL/English 100	□ Reading 125	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters

	•		, , , , , , , , , , , , , , , , , , , ,			
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS			
٠	English 101 – Composition I (3)	Required Program Core	DO THIS – Meet with Advisor to discuss academic goals and plan coursework			
		3 CREDIT HOURS				
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS			
•	Surgical Technology 217 – Sterile Processing Technology Lab (4)	Required Program Core	COMPLETION of Basic Certificate in Sterile Processing Clinical ELIGIBLE to write the International Association of Healthcare Central Service			
٠	Surgical Technology 216 – Sterile Processing Technology (4)	Required Program Core	Material Management			
		8 CREDIT HOURS				
	MINIMUM TOTAL:	11 CREDIT HOURS				
D	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: DA KK (MX) (DH) (TB) (HW) (WB)					

ocus Area: Healthcar



## **PATHWAY:** Surgical Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in surgical technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Applied Science Degree (AAS) in Surgical Technology.

The AAS degree program in Surgical Technology is designed for surgical technologists (formerly called operating room technicians) who perform many different responsibilities in the operating room. They act as the scrub person, as the circulator, and as the first assistant on the surgical team. Surgical technologists' responsibilities involve preparing the operating room and instruments, equipment, and supplies that will be needed; positioning and preparing the patient for surgery; and passing instruments, sponges, and sutures to the surgeon. Surgical technologists are the surgical team's experts in aseptic technique, being constantly vigilant for any break in the technique that could endanger the sterile field. Surgical technologists belong to a separate non-nursing profession and are highly skilled, having completed the necessary specialized education and training focused on working in the operating room. The preferred entry-level education for the surgical technologist is the associate degree.

#### Prospective students must apply for admission into the Surgical Technology Program

#### SURGICAL TECHNOLOGY PROGRAM ADMISSIONS REQUIREMENTS

Students can make formal application to the program when all pre-admission coursework is completed, or when pre-admission coursework completion will occur before the beginning of Semester I of the program. A minimum grade of "C" is required in each pre-admission and general education course. If more candidates apply than the program can accept, the best qualified will be admitted.

Submit a complete application to the Surgical Technology program

- Submit three letters of recommendation
- · Provide official transcripts of all college courses taken by applicant
- Conduct a personal interview with program personnel
- Submit application by April 15 of each year to the Surgical Technology Department, Room 3511 at Malcolm X College
- Complete all of the program prerequisites

Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
<ul> <li>ESL/FS Writing</li> <li>ESL/English 98</li> <li>ESL 99</li> <li>ESL/English 100</li> </ul>	<ul> <li>ESL/FS Reading</li> <li>ESL/Reading 99</li> <li>ESL Reading 100</li> <li>Reading 125</li> </ul>	<ul> <li>FS Mathematics I</li> <li>FS Mathematics II</li> <li>Mathematics 98</li> <li>Mathematics 99</li> </ul>	<ul> <li>College Success</li> <li>Biology 120</li> </ul>

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

	All plans can be mounted to in the needs of part-time students by adding more semesters.				
D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	English 101 – Composition (3)	Program Prerequisite			
•	Biology 121 – Biology I (5)	Program Prerequisite	DO THIS – Meet with advisor to discuss academic goals and plan coursework		
•	Health Professions 102 – Health Career Studies (3) <b>OR</b> Biology 120 – Terminology for Medical Careers (3)	ons 102 – Health Career Studies (3) <b>OR</b>			
		11 CREDIT HOURS			
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	Biology 226 – Human Structure and Function I (4)	Program Prerequisite	DO THIS – Apply to the Surgical Technology Program		
		4 CREDIT HOURS			

## PROGRAMS OF STUDY Healthcare

### (continued from previous page)

SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Biology 227 – Human Structure and Function II (4)	Required Program Core	
Business 284 – Business Communications (3)	Required Program Core	
Surgical Technology 111 – Introduction to Surgical Technology (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
Surgical Technology 112 – Preparation for Surgery (4)	Required Program Core	
Surgical Technology 113 – Special Patient Care (3)	Required Program Core	
	17 CREDIT HOURS	
SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Surgical Technology 114 – Surgical Interventions I (4)	Required Program Core	
Surgical Technology 115 – Surgical Interventions II (4)	Required Program Core	
Surgical Technology 116 - Surgical Interventions III (4)	Required Program Core	
	12 CREDIT HOURS	
SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Social Science 101 – General Course 101 (3) <b>OR</b> Social Science 102 – General Course 102 (3)	Required Program Core	
Surgical Technology 117 – Surgical Pharmacology (2)	Required Program Core	
Surgical Technology 200 – Application of Aseptic Technique (3)	Required Program Core	
	8 CREDIT HOURS	
SEMESTER 6	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Sociology 201 – Introduction to Sociology (3)	Required Program Core	
Speech 101 – Fundamentals of Speech Communication (3)	Required Program Core	
Surgical Technology 211 – Surgical Intervention IV (2)	Required Program Core	DO THIS – Meet with advisor to confirm plans
Surgical Technology 212 – Clinical Practicum I (5)	Required Program Core	
	13 CREDIT HOURS	
SEMESTER 7	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Psychology 201 – General Psychology (3)	Required Program Core	COMPLETION of Associate in Applied Science Degree in Surgical Technology
Surgical Technology – 213 Clinical Practicum II (8)	Required Program Core	DO THIS – Apply online for degree and graduation
	11 CREDIT HOURS	
MINIMUM TOTAL:	76 CREDIT HOURS	



# INFORMATION TECHNOLOGY

### COLLEGE TO CAREERS LOCATION: WILBUR WRIGHT COLLEGE

When was the last time you went a day without using a computer? It is the Information Age and our lives are constantly being redefined by breakthroughs and innovations in Information Technology. Whether it's our smart phones, our work computers, or the enormous databases that store our information online, professionals are needed behind the scenes to design software, maintain information systems, and troubleshoot network issues. If you are interested in working with technology in an expanding and innovative environment, you should certainly consider this focus area.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

		D	AC	BC
A+ Certified Computer Technician (pg. 206)			•	•
Computer Information Systems (p	og. 207, 208)	٠	٠	٠
Computer Science (pg. 118)		٠	0	0
Computer Security and Forensic I	nvestigation (pg. 119, 120)	•	0	٠
Environmental Geographic Inform	ation Systems (GIS) (pg. 121)	•	0	٠
Information Processing (pg. 122)		0	0	•
Networking Systems and Technol	<b>ogy</b> (pg. 123)	*	٠	٠
Web Design (pg. 208)		•	0	٠
Web Development (pg. 124, 126)			•	•
Students in Information Technology may take classes like the following:				
English 101	Composition I May require taking English readiness courses			
Computer Information Systems 101	Computer Science 101			
Computer Information Systems 116 Operating Systems I				
Computer Information Systems 118 IT Problem Solving				
Mathematics 118 or above         General Education Mathematics or a				
D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE				/

\*PENDING APPROVAL

Information Technology



DEGREE CODE: AS 0211

## **PATHWAY:** Computer Science

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Computer Science. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES		
□ ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	Fine Arts/Humanities: (may	College Success		
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American Studies 101	□ Computer Information Systems 120		
□ ESL 99	ESL Reading 100	Mathematics 98		□ Computer Information Systems 135		
ESL/English 100	□ Reading 125	□ Mathematics 99				

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

DGECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	English 101 – Composition I (3)	Communications		
•	Computer Information Systems 101 – Computer Science 101 (3)	Mathematics/Science Elective		
•	Computer Information Systems 116 – Operating Systems I (3) <b>OR</b> Computer Information Sytems 118 – IT Problem Solving (3)	Mathematics/Science Elective	DO THIS – Meet with advisor to discuss academic goals and plan	
• •	Mathematics 207 – Calculus and Analytic Geometry I (5) COMPASS-based placement or prerequisite: Mathematics 140 – College Algebra (4)/ Mathematics 141 – Plane Trigonometry (3) <b>OR</b> Mathematics 143 – Pre Calculus (6)	Mathematics	coursework	
• •	Humanities course (3)	Humanities		
		17 CREDIT HOURS		
GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 102 – Composition II (3)	Communications		
•	Humanities course (3)	Humanities	ALMOST halfway through Associate ir Science degree DO THIS – Meet with advisor to	
• •	Economics 201 – Introduction to Macroeconomics (3)	Social/Behavioral Sciences		
•	Computer Information Systems 103 – Fundamentals of Programming (3)	Mathematics/Science Elective	confirm plans	
•	Computer Information Systems 144 – Java-based Programming Language (3)	Mathematics/Science Elective		
		15 CREDIT HOURS		
GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Speech 101 – Fundamentals of Speech (3)	Communications		
•	Economics 202 – Introduction to Microeconomics (3)	Social/Behavioral Sciences	DO THIS – Go to Career Center to	
•	Mathematics 146 – Discrete Mathematics (4) COMPASS-based placement or prerequisite: Mathematics 140 – College Algebra (4)	Elective	explore both continued education and employment options DO THIS – Mid-term check-in with	
•	Computer Information Systems 142 – C-based Programming Language (3)	Mathematics/Science Elective	advisor	
•	Computer Information Systems 244 – Advanced Java-based Programming Language (3)	Mathematics/Science Elective		
		16 CREDIT HOURS		

Information Technology

### (continued from previous page)

D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Life Sciences course (4)	Life Sciences	
•	<ul> <li>Physical Sciences (3)</li> <li>Fine Arts course (3)</li> </ul>		Physical Sciences	COMPLETION of Associate in Science degree in Computer Science DO THIS – Apply online for degree and
•			Fine Arts	
•	•	Computer Information Systems 260/299 – Field Project/Special Topics (3)	Elective	graduation
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	
			16 CREDIT HOURS	
		MINIMUM TOTAL:	64 CREDIT HOURS	
D	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (a) (**) (**) (**) (**) (**)			



DEGREE CODE: BC 0297

## **PATHWAY:** Computer Security and Forensic Investigation, Track I: Information Security

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Computer and Forensic Investigation (CSFI). It does not represent a contract, nor does it guarantee course availability. The Basic Certificate (BC) program in CSFI consists of two tracks: (1) Information Security and (2) Forensic Investigation (Digital Forensics). CSFI includes a required core group of courses and expands on the Information Security focus and the Forensic Investigation focus. All students are required to complete the core course group prior to selecting one track that fits their objective. If this pathway is followed as outlined, you will earn a Basic Certificate in Computer Security and Forensic Investigation, Track I: Information Security.

The Information Security track focuses on design, implementation, and management of information security in the corporate environment. Students will be prepared for the nationally recognized Certified Information Systems Security Professional (CISSP) Exam. CISSP designation can provide career enhancement, increase marketability, and ensure prospective employers of a certain level of information security knowledge.

#### Choose your courses with your College Advisor.

Communications pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
ENGLISH PLACEMENT	READING PLACEMENT	
ESL/FS Writing	□ ESL/FS Reading	
ESL/English 98	ESL/Reading 99	
□ ESL 99	□ ESL Reading 100	
ESL/English 100	□ Reading 125	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Computer Security and Forensic Investigation 101 – General Technology Essentials (4)	Required Program Core	
•	Computer Security and Forensic Investigation 102 – Introduction to Information Security (4) Students may opt to test out of Computer Security and Forensic Investigation 101 if they have extensive computer and networking education/experience.	Required Program Core	DO THIS – Meet with advisor to choose courses
		8 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Computer Security and Forensic Investigation 202 – Introduction to Cybercrime (3)	Required Program Core	ALMOST halfway through Basic Certificate
		3 CREDIT HOURS	

Information Technology

### (continued from previous page)

BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Computer Security and Forensic Investigation 213 – Information Security Technology (3)	Required Program Core	DO THIS – Go to Career Center to explore
•	Computer Security and Forensic Investigation 214 – Information Security Systems Analysis (4)	Required Program Core	continued education and employment options DO THIS – Mid-term check-in with advisor
		7 CREDIT HOURS	
BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Computer Security and Forensic Investigation 215 – Information Security Domain (3)	Required Program Core	COMPLETION of Basic Certificate in Computer
•	Computer Security and Forensic Investigation 216 – Information Security Program Manager (3)	Required Program Core	Security and Forensic Investigation, Track I: Information Security
		6 CREDIT HOURS	
	MINIMUM TOTAL:	24 CREDIT HOURS	



DEGREE CODE: BC 0297

## PATHWAY: Computer Security and Forensic Investigation, Track II: Digital Forensics

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Computer and Forensic Investigation (CSFI). It does not represent a contract, nor does it guarantee course availability. The Basic Certificate (BC) program in CSFI consists of two tracks: (1) Information Security and (2) Forensic Investigation (Digital Forensics). CSFI includes a required core group of courses and expands on the Information Security focus and the Forensic Investigation focus. All students are required to complete the core course group prior to selecting one track that fits their objective. If this pathway is followed as outlined, you will earn a Basic Certificate in Computer Security and Forensic Investigation, Track II: Forensic Investigation (Digital Forensics).

The Digital Forensics (Forensic Investigation) track focuses on computer forensic investigation and provides students, professionals, law enforcement personnel, criminal justice majors, and other interested parties with the procedures and methodology for investigating computer crimes, and handling electronic evidence as it relates to criminal procedures.

#### Choose your courses with your College Advisor.

	Communications pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		
logy	ENGLISH PLACEMENT	READING PLACEMENT	
lioun	□ ESL/FS Writing	□ ESL/FS Reading	
2	□ ESL/English 98	ESL/Reading 99	
	□ ESL 99	□ ESL Reading 100	
	□ ESL/English 100	□ Reading 125	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Computer Security and Forensic Investigation 101 – General Technology Essentials (4)	Required Program Core	
٠	Computer Security and Forensic Investigation 102 – Introduction to Information Security (4) Students may opt to test out of Computer Security and Forensic Investigation 101 if they have extensive computer and networking education/experience.	Required Program Core	DO THIS – Meet with advisor to choose courses
		8 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Computer Security and Forensic Investigation 202 – Introduction to Cybercrime (3)	Required Program Core	ALMOST halfway through Basic Certificate
		3 CREDIT HOURS	

## PROGRAMS OF STUDY Information Technology

#### (continued from previous page)

BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Computer Security and Forensic Investigation 203 – Financial Cybercrime (3)	Required Program Core	<b>DO THIS</b> – Go to Career Center to explore continued education and employment options
•	Computer Security and Forensic Investigation 204 – Introduction to Computer Forensics and Law (3)	Required Program Core	DO THIS – Mid-term check-in with advisor
		6 CREDIT HOURS	
BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Computer Security and Forensic Investigation 205 – Computer Forensics Technology (3)	Required Program Core	COMPLETION of Basic Certificate in Computer
•	Computer Security and Forensic Investigation 206 – Internet Vulnerabilities, Criminal Activities and Investigative Procedures (4)	Required Program Core	Security and Forensic Investigation, Track II: Digital Forensics
		7 CREDIT HOURS	
	MINIMUM TOTAL:	24 CREDIT HOURS	
D =	DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE	Programs	offered at: DA KK MX OH TR HW WR



### **PATHWAY:** Environmental Geographic Information Systems (GIS) Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Environmental Geographic Information Systems (GIS). It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Environmental GIS. The Basic Certificate program in Environmental GIS introduces the fundamental concepts of GIS and real world representation, using GIS vector and raster technology via spatial data input, topology, cartographic projections, and coordinate systems. The program prepares students with background information and technological skills to explore, capture, manage, analyze, model, perform spatial operations, and to find trends and patterns on landscape.

#### DEGREE CODE: BC 0264

#### Choose your courses with your College Advisor.

Communications and mathematics pre-deg	, ACT or department chair recommendation.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I
ESL/English 98	ESL/Reading 99	□ FS Mathematics II
□ ESL 99	ESL Reading 100	□ Mathematics 98
□ ESL/English 100	□ Reading 125	□ Mathematics 99

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Physical Sciences 201 – Fundamentals of Vector GIS (4) <b>OR</b> Physical Sciences 202 – Raster GIS and Remote Sensing (4)	ntals of Vector GIS (4) <b>OR</b> IS and Remote Sensing (4) Required Program Core	
٠	English 101 – Composition (3)	Required Program Core	DO THIS – Meet with advisor to choose courses
•	Computer Information Systems 120 – Introduction to Microcomputers (3) <b>OR</b> Computer Information Systems 145 – Database Mangement (3)	Required Program Core	DO THIS – Meet with advisor to choose courses
٠	Mathematics 125 – Introductory Statistics (4)	Required Program Core	
		14 CREDIT HOURS	

## PROGRAMS OF STUDY Information Technology

### (continued from previous page)

BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS			
•	Physical Sciences 201 – Fundamentals of Vector GIS (4) <b>OR</b> Physical Sciences 202 – Raster GIS and Remote Sensing (4)	Required Program Core	COMPLETION of Basic Certificate in Environmental GIS			
٠	Geography 201 — Physical Geography (3) <b>OR</b> Geology 201 — Physical Geology with Lab (3-4)	Required Program Core	<b>DO THIS</b> – Go to Career Center to explore continued education and employment options			
		7-8 CREDIT HOURS				
	MINIMUM TOTAL:	21-22 CREDIT HOURS				
D =	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: A (A) (A) (A) (A) (A) (A) (A) (A) (A) (					



**PATHWAY:** Information Processing

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in Information Processing. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Information Processing. The Basic Certificate program in Information Processing prepares students to develop skills in information technology, emphasizing software applications, and modern office procedures. Courses are designed to provide instruction in computer keyboarding, computer literacy, word processing, spreadsheets, databases, business writing, and use of the Internet and electronic mail. Students also receive training in desktop publishing and apply their skills to office settings through their practicum experience.

### Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Business and Commercial Technology 503 – Business Writing (3)	Required Program Core	
•	Business and Commercial Technology 508 – Practicum (1)	Required Program Core	
	Business and Commercial Technology 525 – Introduction to Office Systems (2)	Required Program Core	DO THIS – Meet with advisor to choose courses
	Business and Commercial Technology 526 – Introduction to Personal Computers (2)	Required Program Core	DO THIS – Meet with advisor to choose courses
•	Business and Commercial Technology 540 – Business Mathematics III (3)	Required Program Core	
•	Business and Commercial Technology 543 – Keyboard Microcomputers I (2)	Required Program Core	
		13 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Business and Commercial Technology 544 – Keyboard Microcomputers II (2)	Required Program Core	
•	Business and Commercial Technology 550 – Word Processing Application (2)	Required Program Core	
	Business and Commercial Technology 551 – Spreadsheet Applications (2)	Required Program Core	
	Business and commercial rechnology 551 – Spreadsheet Applications (2)	Required Flograni Core	COMPLETION of Basic Certificate in Information
	Business and Commercial Technology 552 – Database Applications (2)	Required Program Core	COMPLETION of Basic Certificate in Information Processing
•		, ,	
•	Business and Commercial Technology 552 – Database Applications (2)	Required Program Core	COMPLETION of Basic Certificate in Information Processing
•	Business and Commercial Technology 552 – Database Applications (2) Business and Commercial Technology 553 – Desktop Publishing Applications (2)	Required Program Core Required Program Core	

Information Technology



**DEGREE CODES:** \*AAS 0141 AC 0142 BC 0143

\*PENDING APPROVAL

## **PATHWAY:** Networking Systems and Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a degree in Networking Systems and Technology. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), an Advanced Certificate (AC), and an Associate in Applied Science (AAS) Degree in Networking Systems and Technology. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The Networking Systems and Technology AAS program is for students interested in administering and maintaining network equipment such as routers, switches, and servers, as well as, maintaining software and services that are common in modern network infrastructures. The curriculum covers both hardware and software components which help prepare students for jobs in the Information Technology (IT) market. It also offers students relevant knowledge and skills required in a variety of industry certifications including: A+, Network+, CCENT, CCNA and CCNA Security.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	Computer Information Systems 120
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	□ Business 111
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

		, , ,		
D AC BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• •	English 101 – Composition I (3)	Communications		
• • •	Computer Information Systems 101 – Computer Science 101 (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
• • •	Computer Information Systems 116 – Operating Systems I (3)	Required Program Core		
• •	Mathematics 118 (4) or above	Mathematics/Sciences		
		13 CREDIT HOURS		
D AC BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• • •	Computer Information Systems 111 – Computer Operations (3)	Required Program Core		
• •	Computer Information Systems 255 – Operating Systems/Client (3)	Required Program Core	DO THIS – Meet with advisor to confirm	
• • •	Networking Technologies 121 – Internetworking I (3)	Required Program Core	plans	
• •	Business 111 – Introduction to Business (3)	Required Program Core		
		12 CREDIT HOURS		
D AC BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• • •	Networking Technologies 122 – Internetworking II (3)	Required Program Core		
• • •	Computer Security and Forensic Investigation 102 – Information Security Essentials (3)	Required Program Core	COMPLETION of Basic Certificate in Networking Systems and Technology DO THIS – Go to Career Center to explore	
• •	Computer Information Systems 118 – IT Problem Solving (3)	Program Elective	both continued education and employmen	
	Science course (3)	Science	options DO THIS – Mid-term check-in with adviso	
• • •	Other CIS/NET TEC/COMPSFI courses (3)	Program Elective		

Information Technology

#### (continued from previous page)

AC	BC		SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
<ul> <li>Networking Technologies 221 – Internetworking III (3)</li> </ul>				Required Program Core	
•	•	Networking Technologies 2	40 – Operating Systems/Server I (3)	Required Program Core	
•	•	Computer Information Syste	ems 260 – Field Project (Capstone or Internship) (3)	Required Program Core	DO THIS – Mid-term check-in with advis
۰	0	Social/Behavioral Sciences	course (3)	Social/Behavioral Sciences	
•	•	Computer Security and Fore	ensic Investigation 231 – Internetworking Security (3	) Program Elective	
				15 CREDIT HOURS	
AC	BC		SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTION
•	٠	Networking Technologies 2	22 – Internetworking IV (3)	Required Program Core	COMPLETION of Advanced Certificate
<ul> <li>Humanities/Fine Arts course (3)</li> </ul>			e (3)	Humanities/Fine Arts (HD)	Networking Systems and Technology COMPLETION of Associate in Applied Science degree in Networking Systems a Technology DO THIS – Apply online for certificate or degree and graduation
				6 CREDIT HOURS	
			MINIMUM TOTA	AL: 61 CREDIT HOURS	
			PROGRAM ELE	ECTIVES	
Other course		NET TEC/COMPSFI	Computer Information Systems 118 – IT Problem Solving (3)	Computer Information Systems 120 – Introduction to Microcomputers (3)	Computer Security and Forensic Investigation 231 – Internetworking Security (3)



\*AAS TBD \*AC 0155 \*BC 0152 \*PENDING APPROVAL

## **PATHWAY:** Web Development

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in Web Development. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Web Development. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The Web Development AAS program prepares students for entry-level positions in website design, development, and administration. Students will learn various programming principles, languages, and web technologies to effectively create and deploy dynamic websites. Students will also learn how to integrate web and database servers to increase the productivity and interactivity of a website. Potential job opportunities for students in this program include web designer, web developer, e-commerce manager, web technician, or web server administrator.

#### Choose your courses with your College Advisor.

		l mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.			
	ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES		
[	□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	College Success		
[	ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	Computer Information Systems 120		
[	□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	Business 111		
[	□ ESL/English 100	□ Reading 125	□ Mathematics 99				

PROGRAMS OF STUDY Information Technology

#### (continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

AC				
	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	English 101 – Composition I (3)	Communications	
•	0	Computer Information Systems 101 – Computer Science 101 (3)	Required Program Core	
٠	۰	Computer Information Systems 116 – Operating Systems I (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
0	0	Mathematics 118 – General Education Mathematics (4) <b>OR</b> above	Mathematics/Science	
			13 CREDIT HOURS	
AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Computer Information Systems 144 – Java-based Programming (3)	Required Program Core	
٠	٠	Computer Information Systems 158 – Web Development I (3)	Required Program Core	
•	٠	Computer Information System 181 – Web Development I/Basic Technologies (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
۰	0	Business 111 – Introduction to Business (3)	Required Program Core	
	0	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	
			15 CREDIT HOURS	
AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	٠	Computer Information System 258 – Web Development II (3)	Required Program Core	
•	0	Computer Information System 182 – Web Development II/Client Side Scripting (3)	Required Program Core	COMPLETION of Basic Certificate in Web Development DO THIS – Go to Career Center to explore both continued educat
0	0	Networking Technologies 101 – Client-Server Database I (3)	Required Program Core	and employment options
•	۰	Computer Information Systems 118 – IT Problem Solving (3)	Program Elective	DO THIS – Mid-term check-in with advisor
		Colongo gourge (2)	Calanaa	
•		Science course (3)	Science	
•	•	Science course (3)	15 CREDIT HOURS	
AC	BC	SEMESTER 4		ACHIEVEMENTS & NEXT ACTIONS
• AC	BC		15 CREDIT HOURS	ACHIEVEMENTS & NEXT ACTIONS
• AC •	BC	SEMESTER 4 Computer Security and Forensic Investigation 102 –	15 CREDIT HOURS CATEGORY	
• AC •	BC •	SEMESTER 4 Computer Security and Forensic Investigation 102 – Information Security Essentials (3) Computer Information System 281 – Web Development III/	15 CREDIT HOURS CATEGORY Program Elective	ACHIEVEMENTS & NEXT ACTIONS DO THIS – Mid-term check-in with advisor
• AC • •	• BC •	SEMESTER 4 Computer Security and Forensic Investigation 102 – Information Security Essentials (3) Computer Information System 281 – Web Development III/ Server Side Programming (3)	15 CREDIT HOURS CATEGORY Program Elective Required Program Core	
• AC • •	• BC • •	SEMESTER 4         Computer Security and Forensic Investigation 102 – Information Security Essentials (3)         Computer Information System 281 – Web Development III/ Server Side Programming (3)         Computer Information Systems 260 – Field Project (3)	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Required Program Core	
• AC • •	• BC • •	SEMESTER 4         Computer Security and Forensic Investigation 102 –         Information Security Essentials (3)       Computer Information System 281 – Web Development III/         Server Side Programming (3)       Computer Information Systems 260 – Field Project (3)         Social/Behavioral Sciences course (3)       Social/Behavioral Sciences course (3)	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Required Program Core         Social/Behavioral Sciences	
	BC o o o BC	SEMESTER 4         Computer Security and Forensic Investigation 102 –         Information Security Essentials (3)       Computer Information System 281 – Web Development III/         Server Side Programming (3)       Computer Information Systems 260 – Field Project (3)         Social/Behavioral Sciences course (3)       Social/Behavioral Sciences course (3)	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Required Program Core         Social/Behavioral Sciences         Program Elective	
AC AC AC AC AC	•	SEMESTER 4         Computer Security and Forensic Investigation 102 – Information Security Essentials (3)         Computer Information System 281 – Web Development III/ Server Side Programming (3)         Computer Information Systems 260 – Field Project (3)         Social/Behavioral Sciences course (3)         Computer Information Systems Elective (3)	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Social/Behavioral Sciences         Program Elective         Social/Behavioral Sciences         Social/Behavioral Sciences         Social/Behavioral Sciences         Program Elective         Social/Behavioral Sciences	DO THIS – Mid-term check-in with advisor
AC AC AC AC AC AC AC	•	SEMESTER 4         Computer Security and Forensic Investigation 102 –         Information Security Essentials (3)       Computer Information System 281 – Web Development III/         Server Side Programming (3)       Computer Information Systems 260 – Field Project (3)         Social/Behavioral Sciences course (3)       Computer Information Systems Elective (3)         Set	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Social/Behavioral Sciences         Program Elective         15 CREDIT HOURS         CATEGORY	DO THIS – Mid-term check-in with advisor ACHIEVEMENTS & NEXT ACTIONS COMPLETION of Associate in Science degree in Web Developm COMPLETION of Advanced Certificate in Web Development
AC	•	SEMESTER 4         Computer Security and Forensic Investigation 102 –         Information Security Essentials (3)       Computer Information System 281 – Web Development III/         Server Side Programming (3)       Computer Information Systems 260 – Field Project (3)         Social/Behavioral Sciences course (3)       Computer Information Systems Elective (3)         Set	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Social/Behavioral Sciences         Program Elective         15 CREDIT HOURS         CATEGORY         Required Program Core         Regram Elective         Program Elective         Reguired Program Cores         Required Program Core	DO THIS – Mid-term check-in with advisor ACHIEVEMENTS & NEXT ACTIONS COMPLETION of Associate in Science degree in Web Developm COMPLETION of Advanced Certificate in Web Development
AC           AC	•	SEMESTER 4 Computer Security and Forensic Investigation 102 – Information Security Essentials (3) Computer Information System 281 – Web Development III/ Server Side Programming (3) Computer Information Systems 260 – Field Project (3) Social/Behavioral Sciences course (3) Computer Information Systems Elective (3) ESEMESTER 5 Computer Information Systems 282 – Web Development IV/ Web Database Integration (3) ENTITIENTIAL	15 CREDIT HOURS         CATEGORY         Program Elective         Required Program Core         Required Program Core         Social/Behavioral Sciences         Program Elective         15 CREDIT HOURS         CATEGORY         Required Program Core         Social/Behavioral Sciences         Program Elective         15 CREDIT HOURS         CATEGORY         Required Program Core         S CREDIT HOURS	DO THIS – Mid-term check-in with advisor ACHIEVEMENTS & NEXT ACTIONS COMPLETION of Associate in Science degree in Web Developm COMPLETION of Advanced Certificate in Web Development

## Information Technology



AS 0211

## **PATHWAY:** Web Development

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Web Development. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree in Web Development. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a circle in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	Computer Information Systems 120	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	□ Computer Information Systems 135	
ESL/English 100	□ Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	English 101 – Composition I (3)	Communications		
٠	۰	Computer Information Systems 101 – Computer Science 101 (3)	Mathematics/Science Elective		
٠	۰	Computer Information Systems 116 – Operating Systems I (3)	Mathematics/Science Elective	<b>DO THIS</b> – Meet with advisor to discuss academic goals and plan coursework	
٠	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	5 p	
٠	٠	Mathematics 118 – General Education Mathematics (4) or above	Mathematics		
			16 CREDIT HOURS		
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
٠	٠	English 102 – Composition II (3)	Communications		
٠	٠	Humanities course (3)	Humanities		
٠	•	Computer Information Systems 144 – Java-based Programming (3)	Mathematics/Science Elective	ALMOST halfway through Assoicate in Science degree	
٠	٠	Life Sciences course (4)	Life Sciences	DO THIS – Meet with advisor to confirm plans	
•	٠	Computer Information Systems 181 – Web Development I/Basic Technologies (3)	Mathematics/Science Elective		
			16 CREDIT HOURS		
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
٠	•	Speech 101 – Fundamentals of Speech (3)	Communications		
٠	٠	Economics 201 – Introduction to Macroeconomics (3)	Social/Behavioral Sciences		
•	٠	Humanities course (3)	Humanities	<b>DO THIS</b> – Go to Career Center to explore both continued education and employment options	
٠	•	Computer Information Systems 182 – Web Development II/Client Side Scripting (3)	Mathematics/Science Elective	DO THIS – Mid-term check-in with advisor	

Networking Technologies 101 – Client Server Database I (3)

15 CREDIT HOURS

Mathematics/Science Elective

Information Technology

## (continued from previous page)

D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Physical Sciences (3)	Physical Sciences	
•	٠	Economics 202 – Intro to Microeconomics (3)	Social/Behavioral Sciences	_
•	• Fine Arts course (3)		Fine Arts	_
•	Computer Information Systems 281 – Web Development III/Server Side     Programming (3)		Mathematics/Science Elective	
•	٠	Elective course (3)	Elective	_
			15 CREDIT HOURS	
D	GECC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٥	Computer Information Systems 282 – Web Development IV/Web Database Integration (3)	Mathematics/Science Elective	COMPLETION of Associate in Science degree in Web Development DO THIS – Apply online for degree and graduation
			3 CREDIT HOURS	
		MINIMUM TOTAL:	65 CREDIT HOURS	

Human Sciences (Liberal Arts)



# HUMAN SCIENCES (LIBERAL ARTS)

## COLLEGE TO CAREERS LOCATION: HARRY S TRUMAN COLLEGE

**Don't let the word "arts"** fool you! While the phrase "Liberal Arts" may at first conjure up images of painters or musicians, it is really an umbrella term used by universities to encompass all disciplines of the Social Sciences and Humanities. Studies of human behavior, history, politics, culture, language, literature, and, yes, fine and performing arts, are all subsumed by this category. It is important to note that most students of the liberal arts will need to earn at least a bachelor's degree in their field of study, which, at the two year level, means completing our Associate in Arts transfer degree. So, whether you can picture yourself as a psychologist, a lawyer, a graphic designer, or a journalist, if you plan on transferring to a four-year school to study anything other than science, mathematics, or technology, this is the focus area for you.

## DEGREE AND CERTIFICATE PATHWAYS OFFERED

This is an abbreviated list. Check with your advisor to learn more about your options in Human Sciences (Liberal Arts). Students may also consider a Human Sciences (Liberal Arts) pathway in areas such as anthropology, gender and women's studies, history, social work, and sociology.

	D	AC	BC		D	AC	BC
Art Education (pg. 196)	٠	•	٠	Music Performance (pg. 147)	٠	۰	•
Art Studio (pg. 196)	٠	٠	•	Music Technology (pg. 148)	0	•	٠
Cosmetology (pg. 129)	٠	٠	۰	Philosophy (pg. 150)	٠		0
Digital Multimedia Design (pg. 208, 209)	٠	٠	٠	Political Science (pg. 151)	٠	•	0
English (pg. 130)	٠	٠	•	Psychology (pg. 152)	٠	•	0
Human Geography (pg. 132)	٠	•	۰	Religious Studies (pg. 154)	٠	۰	0
International Studies (pg. 133)	٠	٠	•	Social Work: Generalist (pg. 209, 210)	٠	٠	0
Journalism (pg. 135)	٠	٠	•	Social Work: Youth Work (pg. 210, 211)	٠	٠	٠
Media Communications (pg. 137, 139, 141, 143)	٠	•	۰	Theater Arts (pg. 155)	٠	۰	0
Music Business (pg. 144)	٠	٠	٠	Visual Media Communications (pg. 211, 212)	٠	٠	•
Music Education (pg. 145)	٠	٠	۰	World Languages (pg. 157)	٠	۰	0

## LAW AND PUBLIC SAFETY DEGREE AND CERTIFICATE PATHWAYS OFFERED

This is an abbreviated list. Check with your advisor to learn more about your options.

	D	AC	BC		D	AC	BC
Criminal Justice: Private Police (pg. 159)	٠	•	•	Emergency Management: Homeland Security (pg. 162)	•	۰	•
Criminal Justice: Public Police (pg. 159)	٠	٠	•	Emergency Management: Incident Command (pg. 163)	٠	0	•
Emergency Management: Emergency Preparedness (pg. 160)	•	0	٠	Unarmed Security Guard (pg. 165)	۰	0	•

Students in these programs may	take classes like the following:
--------------------------------	----------------------------------

English 101	Composition I May require taking English readiness courses
Speech 101	Introduction to Speech
Psychology 201	General Psychology
Mathematics 118 or above	General Education Mathematics
D = DEGREE // AC = ADVANCED CERTIF	FICATE // BC = BASIC CERTIFICATE

HUMAN SCIENCES (LIBERAL ARTS)



AC 0349

## **PATHWAY:** Cosmetology

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing an Advanced Certificate (AC) in Cosmetology. It does not represent a contract, nor does it guarantee course availability. The Advanced Certificate program in the field of Cosmetology offers challenging and rewarding opportunities designed to give students thorough training in the art, skill and applied science used in the treatment of hair, nails, and skin. The program meets the standards of the Illinois Department of Finance and Professional Regulation (IDFPR) in total hours, teaching staff, equipment, facilities, libraries, and course content.

Students are required to complete a specific number of hours in the Technical Center Styling Salon. Once students have completed all coursework and laboratory hours, they are ready to sit for the licensure examination through the IDFPR. Students must be licensed in order to practice Cosmetology in Illinois.

Choose your courses with your College Advisor.

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Cosmetology 101 – Introduction to Cosmetology/Cosmetic Art (5)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and
•	Cosmetology 102 – Hair Shaping Technology (5)	Required Program Core	plan coursework
		10 CREDIT HOURS	
AC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Cosmetology 103 – Basic Styling Technology (5)	Required Program Core	
٠	Cosmetology 104 – Hair Tinting Technology (3)	Required Program Core	ALMOST halfway through the Advanced Certificate! DO THIS – Mid-term check-in with advisor
٠	Cosmetology 105 – Salon Technology (5)	Required Program Core	
		13 CREDIT HOURS	
AC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Cosmetology 106 – Salon Technology II (5)	Required Program Core	
٠	Cosmetology 201 – Advanced Styling Technology (4)	Required Program Core	COMPLETION of Advanced Certificate in Cosmetology DO THIS – Apply online for advanced certificate
٠	Cosmetology 202 – Summative Seminar (4)	Required Program Core	
		13 CREDIT HOURS	
	ΜΙΝΙΜυΜ ΤΟ	TAL: 36 CREDIT HOURS	
D =	DEGREE // AC = ADVANCED CERTIFICATE // BC = BASI	C CERTIFICATE	Programs offered at: (DA) (KK) (MX) (OH) (TR) (HW) (WR

Human Sciences (Liberal Arts)



AA 0210

## **PATHWAY:** English

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you love to curl up with a good book, then a pathway in English might be for you. But there's a lot more to studying English than just reading novels, short stories, plays, and poetry by English-speaking writers. You might choose to focus on the literature of a certain time period, location, or author. Or, you might write on material from film, journalism, and TV. Students in English work as educators, writers, advertising managers, public relations specialists and just about any career that needs people who write well.

This is an **example course sequence** for students interested in pursuing English. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	English 101 – Composition I (3)	Communications	
•	٠	Mathematics 125 – Introductory Statistics (4)	Mathematics	
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
•	٠	Literature 110 – Introduction to Literature (3)	Humanities	
•	۰	World Language course (4)	Elective	
			17 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	English 102 – Composition II (3)	Communications	
•	٠	Physical Sciences course (4)	Physical Sciences	DO THIS – Mid-term check-in with advisor
•	•	Literature 111 – Poetry (3) <b>OR</b> Literature 112 – Drama (3) <b>OR</b> Literature 113 – Fiction (3)	Humanities	DO THIS – Visit your campus Transfer Center to discu options and create a short list of four-year schools for
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	potential transfer
•	٠	World Language course (4)	Elective	
			17 CREDIT HOURS	
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Life Sciences course (4)	Life Sciences	DO THIS – Mid-term check-in with advisor
•	٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS - Begin seeking additional four-year funding
•	٠	Program Elective (3)	Program Elective	<ul> <li>outlets such as scholarships and aid</li> <li>DO THIS – Prepare documentation for college</li> </ul>
•	•	World Language course (4)	Elective	application

Human Sciences (Liberal Arts)

### (continued from previous page)

GECC	SEMESTER 4 Social/Behavioral Sciences course (3)	CATEGORY Social/Behavioral (HD)	ACHIEVEMENTS & NEXT ACTIONS	
•				
<ul> <li>Program Elective (3)</li> <li>Fine Arts course (3)</li> </ul>		Program Elective COMPLETION of Associate in Arts degr DO THIS –Apply to four-year schools of y		
		Fine Arts	DO THIS – Apply to four-year schools of your choice DO THIS – Apply online for degree and graduation	
۰	World Language course (4)	Elective		
		16 CREDIT HOURS		
	MINIMUM TOTAL:	64 CREDIT HOURS		
		AM ELECTIVES		
	111 – Poetry (3)	Literature 131 – Survey of Afr		
	112 – Drama (3)	Literature 132 – Native American Literature (3)		
	113 – Fiction (3)	Literature 133 – African-American Fiction (3)		
	114 – Ideas in Prose (3)	Literature 137 – The Black Woman in Black Fiction (3)		
	115 – Great Books Seminar/Topic Literature (3)	Literature 140 – Great Books: Literary Sources of Art (3)		
	116 – American Literature from Colonial Days to Civil War (3)	Literature 150 – Women's Literature (3)		
	117 – American Literature from the Civil War to the 20th Century (3)	Literature 153 – Gay and Lesbian Literature (3)		
	118 – English Literature from its Beginning to the Age of Johnson (3)	□ Literature 155 – Literature and Film (3) □ Literature 156 – Creative Non-fiction (3)		
	119 – English Literature from the Romantic Revival to the 20th Century (3)			
	120 – Contemporary British and American Literature (3) 121 – Contemporary African-American Literature (3)	□ Literature 157 – Graphic Novels (3) □ Literature 211 – Shakespeare (3)		
	122 – Perspectives in Black Literature (3)	Literature 220 – World Litera		
	123 – Literature of the U.S. from the Civil War to the Present (3)		ature (3) ature: Romanticism British/American (3)	
	124 – Experimental Literature (3)	□ Literature 223 – Introduction		
	125 – Psychology in Black Literature (3)		ion: Psychology and Prophecy (3)	
	126 – Contemporary American Literature (3)	English 241 – Creative Writing	, , , , , , , , , , , , , , , , , , , ,	
	127 – Contemporary British Literature (3)	English 243 – Creative Writing: Fiction (3)		
	128 – Latin American Literature (3)	$\square$ English 245 – Creative Writing: Poetry (3)		
	129 – U.S. Latino(a) Literature (3)	□ English 299 – Special Topics		
	130 – Children's Literature (3)			

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Human Sciences (Liberal Arts)



AA 0210

## PATHWAY: Human Geography

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you think geography is all about staring at maps and memorizing state capitols, you couldn't be more wrong. As a Human Geography student, you'll study a wide variety of subjects: deserts in the making, the causes of many urban governmental decisions, the paths of tornados, and the way international trade agreements affect business in a small town. Human Geographers study how human communities function globally and locally and learn how to read future social and economic trends. Study of Human Geography will allow you to obtain your bachelor's degree at a four-year college. If you are interested in community development, environmental protection, local government, or in working in organizations like the United Nations Children's Fund (UNICEF), the Red Cross, the World Health Organization or even the World Bank, the human geography pathway is a great choice for you.

This is an **example course sequence** for students interested in pursuing Human Geography. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (May	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101		
ESL/English 100	□ Reading 125	□ Mathematics 99			

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	•	English 101 – Composition I (3)	Communications	
٠	٠	Mathematics 125 – Introductory Statistics (4)	Mathematics	
٠	• Fine Arts course (3)		Fine Arts	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
٠	٠	Geography 101 – World Geography (3)	Social/Behavioral Sciences (HD)	
٠	0	World Language course (4)	Elective	
			17 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	•	English 102 – Composition II (3)	Communications	
٠	٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS – Mid-term check-in with advisor
٠	٠	Geography 102 – Economic Geography (3)	Social/Behavioral Sciences	DO THIS – Visit your campus Transfer Center to discuss options and
•	۰	World Language course (4)	Elective	create a short list of four-year schools for potential transfer
•	0	Elective (3)	Elective	
			16 CREDIT HOURS	

Human Sciences (Liberal Arts)

### (continued from previous page)

D	GECC	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Geography 201 – Physical Geography (3)		Physical Sciences	
•	٠	Humanities/Fine Arts (3)		Humanities/Fine Arts	DO THIS – Mid-term check-in with advisor
•	٠	Social/Behavioral Sciences (3)		Social/Behavioral Sciences	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid
•	0	Elective (3)		Elective	DO THIS – Prepare documentation for college application
•	0	Elective (3)		Elective	
				15 CREDIT HOURS	
D	GECC	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Humanities course (3)		Humanities	
•	٠	Social/Behavioral Sciences course (3)		Social/Behavioral Sciences	COMPLETION of Associate in Arts Degree in Human Geography
•	٠	Life Sciences course (4)		Life Sciences	DO THIS – Apply to four-year schools of your choice
•	0	Elective (3)		Elective	DO THIS – Apply online for degree and graduation
•	0	Elective (3)		Elective	
				16 CREDIT HOURS	
		MINIMU	M TOTAL:	64 CREDIT HOURS	
				PROGRAM ELECTIVES	
			<ul><li>Philosop</li></ul>	hy 106 – Introduction to Philosoph hy 107 – Ethics (3) 101 – Introduction to Religion (3) 108 – Religion and Psychology (3)	

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AA 0210

**PATHWAY:** International Studies

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Want to study the delicate dance of diplomacy and look at the way nations interact on military, economic, and cultural levels? If you feel at home in a field with few black-and-white answers, international studies may be for you. International relations is filled with gray areas; you'll learn to think critically with no fixed set of rules to follow. Students on a pathway in international studies are prepared to enter a four-year institution as a junior, earn their bachelor's degree and become diplomats, global human rights workers, foreign politics experts, and many other careers that require an understanding of how nations interact with one another internationally.

This is an **example course sequence** for students interested in pursuing International Studies. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

Focus Area: Human Sciences (Liberal Arts

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (May	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages	
□ ESL 99	ESL/Reading 100	Mathematics 98	Studies 101		
ESL/English 100	□ Reading 125	□ Mathematics 99			

Human Sciences (Liberal Arts)

### (continued from previous page)

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters

)	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	•	English 101 – Composition I (3)	Communications	
•	٠	Mathematics 125 – Intorductory Statistics (4)	Mathematics	DO THIS – Meet with advisor to confirm plans
•	٠	Social/Behavioral Sciences course(3)	Social/Behavioral Sciences	DO THIS – Begin research on four-year schools
•	۰	World Language course (4)	Elective	
			14 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 102 – Composition II (3)	Communications	
•	٠	Humanities course (3)	Humanities (HD)	DO THIS – Mid-term check-in with advisor
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	DO THIS – Visit your campus Transfer Center to discuss options and create a short list of four-year
•	0	Speech 101 – Fundamentals of Speech (3)	Communications	schools for potential transfer
•	0	World Language course (4)	Elective	
			16 CREDIT HOURS	
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Life Sciences course (4)	Life Sciences	
•	٠	Fine Arts (3)	Fine Arts	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year funding
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	outlets such as scholarships and aid
•	0	Elective (3)	Elective	DO THIS – Prepare documentation for college application
•	0	Elective (3)	Elective	
			16 CREDIT HOURS	
D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0	Elective (3)	Elective	
•	0	Elective (3)	Elective	COMPLETION of Associate in Arts Degree in
•	٠	Physical Sciences course (4)	Physical Sciences	International Studies DO THIS –Apply to four-year schools of your choice
	٠	Humanities/Fine Arts course (3)	Humanities/Fine Arts	DO THIS – Apply online for degree and graduation
	•	Elective (3)	Elective	

	1	PROGRAM ELE	CTIVES
	Anthropology 202 – Cultural Anthropology (3)		History 248 – African History – Modern Period (3)
	Economics 201 – Principles of Economics I (3)		Humanities 205 – World Literature I (3)
	Economics 202 – Principles of Economics II(3)		Humanities 212 – Non-Western Humanities(3)
	Fine Arts 105 – History of Painting, Sculpture, and Architecture (3)		Humanities 215 – The Art and Philosophy of the African Continent (3)
	Fine Arts 107 – History of Painting, Sculpture, and Architecture I (3)		Literature 127 – Contemporary British Literature (3)
	Fine Arts 108 – History of Painting, Sculpture, and Architecture II (3)		Literature 128 – Latin American Literature (3)
	Geography 101 – World Geography (3)		Literature 220 – World Literature (3)
	History 141 – History of World Civilizationsto 1500 (3)		Music 183 – World Music (3)
	History 142 – History of World Civilizations from 1500 (3)		Political Science 204 – International Relations (3)
	History 215 – History of Latin America (3)		Social Science 101 – General Course I Social Science (3)
	History 225 – Modern Middle East History (3)		Social Science 102 – General Course II Social Science (3)
	History 243 – The Far East in the Modern World (3)		Sociology 211 – Race and Ethnic Relations (3)
	History 247 – African History to Colonial Period (3)		
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62 CREDIT HOURS

MINIMUM TOTAL:



## **PATHWAY:** Journalism

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Are you someone who can't get enough of the latest headlines? If so, you may want to consider study in journalism. If you are a quick study with a keen curiosity who can gather, absorb, and deliver information in the heat of a looming deadline: that's what journalism is all about. People with degrees in journalism work in broadcast news writing, copyediting and design, magazine writing, media law and ethics, reporting and more.

This is an **example course sequence** for students interested in pursuing Journalism. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Arts (AA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Theater Arts 131, Fine Arts 104,	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	African-American Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	•	English 101 – Composition I (3)	Communications	
•	٠	Mathematics 125 – Introductory Statistics (4)	Mathematics	
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	DO THIS – Meet with advisor to confirm plans
•	٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS – Begin research on four-year schools
•	0	Program Elective (3)	Program Elective	
•	0	English 150 – College Newspaper (1)	Elective	
			17 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 102 – Composition II (3)	Communications	
•	0	Program Elective (3)	Program Elective	DO THIS – Mid-term check-in with advisor
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss
•	٠	Humanities course (3)	Humanities	options and create a short list of four-year schools for potential transfer
•	•	Program Elective (3)	Program Elective	
•	0	English 150 – College Newspaper (1)	Elective	

Human Sciences (Liberal Arts)

### (continued from previous page)

D	GECC	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	Humanities/Fine Arts course (3)		Humanities/Fine Arts		
•	0	World Language course (4)		Elective	DO THIS – Mid-term check-in with advisor	
•	0	Program Elective (3)		Program Elective	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid	
•	٠	Physical Sciences course (4)		Physical Sciences	DO THIS – Prepare documentation for college application	
•	0	English 150 – College Newspaper (1)		Elective		
				15 CREDIT HOURS		
D	GECC	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	Fine Arts course (3)		Fine Arts		
•	٠	Social/Behavioral Sciences course (3)		Social/Behavioral Sciences	COMPLETION of Associate in Arts degree in Journalism	
•	٠	Life Sciences course (4)		Life Sciences	DO THIS – Apply to four-year schools of your choice	
•	۰	World Language course (4)		Elective	DO THIS – Apply online for degree and graduation	
•	0	English 150 – College Newspaper (1)		Elective		
				15 CREDIT HOURS		
			MINIMUM TOTAL:	63 CREDIT HOURS		
	PROGRAM ELECTIVES					
			English 151 – News Report English 152 – Introduction	ing and Writing (3) to Mass Communication (3)	(0)	
			English 270 - realure Writi	ing for Newspapers and Magazines	(3)	

English 150 – College Newspaper (1) (Repeatable course - can be taken each semester)

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DEGREE CODE: AAS 0083

## PATHWAY: Media Communications: Audio/Video/ Internet Production

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Media Communications: Audio/Video/Internet/ Production (AVIP). If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Media Communications. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Media Communications is a modification and extension of the former Radio and TV Broadcasting Program. Students may choose specialized courses that qualify them in the following areas: 1) Audio/ Video/Internet Production (AVIP), which include Television; 2) Radio Production/Broadcasting; 3) Media Sales and Marketing; and 4) Interactive Media Design. All areas emphasize the use of technology, including computers. Therefore, computer literacy is required for successful completion of this program. The program prepares graduates for entry level positions in related fields and for possible transfer to a four-year institution.

In this specialty area, you will learn to create short video and audio projects and learn all facets of video and audio production from program design (pre-production), and hands-on recording (production) through the editing process (post-production). You will take courses in webcasting and streaming media using state-of-the-art digital technology, facilities, and instruction. By the end of the program, you will have basic knowledge of lighting, camera operation, storyboarding and basic scripting, editing, sound, and producing techniques. Students will assume roles as producers, directors, camera operators and video editors. Pre-and post-production, scripting, graphics, lighting, legal requirements, and nonlinear video editing skills will be emphasized.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: Any Art, Music, or Theater Class, African-American	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Studies 101	Business 141	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Physical/Life Sciences: Biology 107 <b>OR</b>		
□ ESL/English 100	□ Reading 125	□ Mathematics 99	Environmental Technology 107		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters

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D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• Eng	glish 101 – Composition I (3)	Communications	
• Me	edia Communications 190 – Language, Media and Culture (3)	Required Program Core	
• Me	edia Communications 145 – Introduction to Media (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
• Me	edia Communications 231 – TV Production I (3)	Required Program Core	
• Me	edia Communications 203 – Media Writing (3)	Required Program Core	
		15 CREDIT HOURS	
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• Ma	athematics/Science course (3-5)	Mathematics/Science	
• Sp	eech 101 – Fundamentals of Speech Communication (3)	Required Program Core	ALMOST halfway through the Associate in
• Me	edia Communications 170 – History of Television (3)	Required Program Core	Applied Science degree
• Me	edia Communications 232 – TV Production II (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
• Hu	imanities/Fine Arts course (3)	Humanities/Fine Arts	
		15-17 CREDIT HOURS	

Human Sciences (Liberal Arts)

### (continued from previous page)

CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Required Program Core	
Required Program Core	DO THIS – Meet with College Advisor to
Social/Behavioral Sciences	confirm graduation preparedness DO THIS – Go to Career Center to explore
Humanities or Social/Behavioral Sciences (HD,	
Required Program Core	options
Program Elective	
18 CREDIT HOURS	
CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Program Elective	COMPLETION of Associate in Applied
Program Elective	Science in Media Communications COMPLETION of general education course
Required Program Core	DO THIS – Apply online for degree and
Required Program Core	graduation
15 CREDIT HOURS	
63 CREDIT HOURS	
Media Communications 245 – Advanc	ed Production Workshop (3)
Media Communications 260 – Media S	Sales and Marketing (3)
□ Media Communications 261 – Project	Management and Team Dynamics (3)
Media Communications 270 – Introduce	ction to Radio and TV Programming (3)
	Required Program Core         Required Program Core         Social/Behavioral Sciences         Humanities or Social/Behavioral Sciences (HD)         Required Program Core         Program Elective         18 CREDIT HOURS         CATEGORY         Program Elective         Program Elective         Required Program Core         Required Program Core         Required Program Core         Required Program Core         Screen Hours         63 CREDIT HOURS         OGRAM ELECTIVES         Media Communications 245 – Advanc         Media Communications 260 – Media S         Media Communications 261 – Project

- □ Media Communications 241 Video Editing (3)
- □ Media Communications 242 Television Graphics (3)
- □ Media Communications 244 Advanced Videography, Gripping and Lighting Techniques (3)
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□ Speech 160 – Business and Professional Speech (3)

Media Communications 272 – Advanced Audio/Video Production for Interactive Media (3)

**Focus Area:** Human Sciences (Liberal Arts)

PROGRAMS OF STUDY Human Sciences (Liberal Arts)



AAS 0083

## **PATHWAY:** Media Communications: Interactive Media Design Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Media Communications – Interactive Media Design. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Media Communications. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Media Communications is a modification and extension of the former Radio and TV Broadcasting Program. Students may choose specialized courses that qualify them in the following areas: 1) Audio/ Video/Internet Production (AVIP), which include Television; 2) Radio Production/Broadcasting; 3) Media Sales and Marketing; and 4) Interactive Media Design. All areas emphasize the use of technology, including computers. Therefore, computer literacy is required for successful completion of this program. The program prepares graduates for entry level positions in related fields and for possible transfer to a four-year institution.

In the Interactive Media Design specialty area, you will learn the basic principles of graphic design and e-design as they relate to designing for the Internet and multimedia. The program will introduce time-based interactive design, animation, audio, and digital video. You will learn to create interactive experiences, develop original concepts, and take a project from storyboarding to production. Narrative, linear, and non-linear structures will be analyzed as well as advanced navigation schemes and dynamic web strategies.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: Any Art, Music, or Theater Class, African-American	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Studies 101	Business 141	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Physical/Life Sciences: Biology 107 <b>OR</b>		
□ ESL/English 100	□ Reading 125	□ Mathematics 99	Environmental Technology 107		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	English 101 – Composition I (3)	Communications	
٠	Visual Communications 102 – Website Design I (3)	Required Program Core	
٠	Media Communications 145 – Introduction to Media (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
٠	Media Communications 271 – Introduction to Interactive Media (Internet) (3)	Required Program Core	
٠	Visual Communications 103 – Commercial Photography (3)	Required Program Core	
		15 CREDIT HOURS	
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Mathematics/Science course (3-5)	Mathematics/Science	
٠	Visual Communications 202 – Web Design II (3)	Required Program Core	ALMOST halfway through the Associate in
•	Visual Communications 132 – Publication Design (3)	Required Program Core	Applied Science degree
•	Business 141 – Business Mathematics (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Visual Communications 122 – Graphics Software (3)	Required Program Core	
		15-17 CREDIT HOURS	

Human Sciences (Liberal Arts)

### (continued from previous page)

SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
Media Communications 190 – Language, Media and Culture (3)		Required Program Core	DO THIS – Meet with College Advisor to confirm graduation preparedness DO THIS – Go to Career Center to explore both continued education and employment	
Speech 101 – Fundamentals of Speech Communication (3)		Required Program Core		
Visual Communications 212 – Motion Graphics I (3)		Required Program Core		
Humanities or Social/Behavioral Sciences course (3)	ŀ	lumanities or Social/Behavioral Sciences (HD)		
Social/Behavioral Sciences course (3)		Social/Behavioral Sciences	options	
Humanities/Fine Arts course (3)		Humanities/Fine Arts		
		18 CREDIT HOURS		
SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
Visual Communications 201 – Design Management (3)		Required Program Core	COMPLETION of Associate in Applied Science degree in Media Communications COMPLETION of general education course DO THIS – Apply online for degree and graduation	
Program Elective (3)		Program Elective		
Media Communications 295 – Practicum Internship (6)		Required Program Core		
Media Communications 298 – Audio Video or Internet Capstone Project (	3)	Required Program Core		
		15 CREDIT HOURS		
MINIMUM TOT	AL:	63 CREDIT HOURS		
F	ROGR	AM ELECTIVES		
Art 141 – Introduction to the Visual Arts (3)				
Entrepreneurship 201 – Introduction to Entrepreneurship		Media Communications 241 – Video Editing (3)		
Entrepreneurship 202 – Opportunity Recognition and Development (3)		Media Communications 272 – Advanced Audio and Visual Production for Interactive Media		
Entrepreneurship 204 – Entrepreneurial Marketing and Sales (3)		Psychology 206 – Business and Industrial Ps	vchology (prereguisite: Psychology 201)	

PROGRAMS OF STUDY Human Sciences (Liberal Arts)



AAS 0083

# **PATHWAY:** Media Communications: Media Sales and Marketing Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Media Communications – Media Sales and Marketing. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Media Communications. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Media Communications is a modification and extension of the former Radio and TV Broadcasting Program. Students may choose specialized courses that qualify them in the following areas: 1) Audio/ Video/Internet Production (AVIP), which include Television; 2) Radio Production/Broadcasting; 3) Media Sales and Marketing; and 4) Interactive Media Design. All areas emphasize the use of technology, including computers. Therefore, computer literacy is required for successful completion of this program. The program prepares graduates for entry level positions in related fields and for possible transfer to a four-year institution.

The curriculum for Sales and Marketing as part of the Media Communications program is designed to put graduates on the front lines of the business world and, more specifically, to prepare students to understand and communicate the value of media properties (TV, radio, newspaper and Internet). Each course in the Sales and Marketing program is focused and detailed, yet part of a broad-based curriculum that balances relevant management principles with hands-on marketing procedures and techniques.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.		College-level courses that can be taken while in pre-degree courses.			
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: Any Art, Music,	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	or Theater Class, African-American Studies 101	Business 141	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Physical/Life Sciences: Biology 107 <b>OR</b>		
ESL/English 100	□ Reading 125	□ Mathematics 99	Environmental Technology 107		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
Communications	DO THIS – Meet with advisor to discuss academic goals and plan coursework	
Required Program Core		
15 CREDIT HOURS		
CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
Mathematics/Science	ALMOST halfway through Associate in Applied Science degree DO THIS – Meet with advisor to confirm plans	
Fine Arts/Humanities		
Required Program Core		
Required Program Core		
	]	
Required Program Core		
	Communications Required Program Core Required Program Core Required Program Core Required Program Core 15 CREDIT HOURS CATEGORY Mathematics/Science Fine Arts/Humanities Required Program Core	

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D	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	Media Communications 260 – Media Sales and Marketing (3)		Required Program Core	DO THIS – Meet with College Advisor to confirm graduation preparedness DO THIS – Go to Career Center to explore both continued education and employment options		
•	Business 231 – Principles of Marketing (3)		Required Program Core			
•	Business 236 – Advertising (3)		Required Program Core			
•	Social/Behavioral Sciences course (3)		Social/Behavioral Sciences			
•	Humanities or Social/Behavioral Sciences course (3)	I	Humanities or Social/Behavioral Sciences (HD)			
•	Speech 101 – Fundamentals of Speech Communication (3)		Required Program Core			
			18 CREDIT HOURS			
D	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
	Entrepreneurship 201 – Introduction to Entrepreneurship (3)		Required Program Core	COMPLETION of Associate in Applied		
•	Program Elective (3)		Program Elective	Science degree in Media Communications COMPLETION of general education courses DO THIS – Apply online for degree and		
•	Media Communications 295 – Practicum Internship (6)		Required Program Core			
•	Media Communications 298 – Audio Video or Internet Capstone Project (3		Required Program Core	graduation		
			15 CREDIT HOURS			
	ΜΙΝΙΜUΜ ΤΟΤΑ	L:	63 CREDIT HOURS			
	Pr	OGR	AM ELECTIVES			
] E	Business 230 – E-Business Marketing (3) Entrepreneurship 204 – Entrepreneurial Marketing and Sales (3)					
] E	Business 272 – Sales Management (3)		Psychology 206 – Business and Industrial Psychology (3)			
] E	Entrepreneurship 202 – Opportunity Recognition Development (3)		Speech 102 – Public Speaking (3)			
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D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 00 (KK) (MR) (MR) (MR)



DEGREE CODE: AAS 0083

### PATHWAY: Media Communications: Radio Producation and Broadcasting

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Media Communications – Radio Production and Broadcasting. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) Degree in Media Communications. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Media Communications is a modification and extension of the former Radio and TV Broadcasting Program. Students may choose specialized courses that qualify them in the following areas: 1) Audio/ Video/Internet Production (AVIP), which include Television; 2) Radio Production/Broadcasting; 3) Media Sales and Marketing; and 4) Interactive Media Design. All areas emphasize the use of technology, including computers. Therefore, computer literacy is required for successful completion of this program. The program prepares graduates for entry level positions in related fields and for possible transfer to a four-year institution.

The Radio Production/Broadcasting course of study provides a comprehensive overview of the Media Communications industry with a focus in radio. The program provides a real world, hands-on overview of the art and business of radio broadcasting, while developing in-depth knowledge and skills regarding the total operation of a radio station, including the history of radio broadcasting from its inception to the latest radio technology. The program will train students in the areas of on-air talent, production, programming, or business, which includes radio marketing, promotions, and sales.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses the while in pre-degree	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	☐ Fine Arts/Humanities: Any Art, Music, or Theater Class, African-American	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Studies 101	Business 141
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Physical/Life Sciences: Biology 107 <b>OR</b>	
ESL/English 100	□ Reading 125	□ Mathematics 99	Environmental Technology 107	

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	English 101 – Composition I (3)	Communications	
٠	Media Communications 221 – Radio Production (3)	Required Program Core	
•	Media Communications 145 – Introduction to Media (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
٠	Media Communications 102 – Announcing (3)	Required Program Core	
•	Media Communications 203 – Media Writing (3)	Required Program Core	
		15 CREDIT HOURS	
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Mathematics/Science course (3-5)	Mathematics/Science	
•	Speech 101 – Fundamentals of Speech Communication (3)	Required Program Core	ALMOST halfway through Associate in Applied
•	Media Communications 222 - Radio Production II (3)	Required Program Core	Science degree
٠	Media Communications 160 – History of Radio Genre (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Humanities/Fine Arts course (3)	Fine Arts/Humanities	
		15-17 CREDIT HOURS	

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D	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Media Communications 271 – Introductory Interactive Media (Internet) (3)		Required Program Core	
•	Media Communications 260 – Sales and Marketing (3)		Required Program Core	
•	Media Communications 190 – Language, Media and Culture (3)		Required Program Core	DO THIS – Meet with College Advisor to confirm graduation preparedness
•	Humanities or Social/Behavioral Sciences course (3)	Human	ities or Social/Behavioral Sciences (HD)	DO THIS – Go to Career Center to explore both continued education and employment options
•	Business 141 – Business Mathematics (3)		Required Program Core	
•	Program Elective (3)		Program Elective	
			18 CREDIT HOURS	
D	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Social/Behavioral Sciences course (3)		Social/Behavioral Sciences	COMPLETION of Associate in Applied Scie
•	Program Elective (3)		Program Elective	degree in Media Communications COMPLETION of general education courses
•	Media Communications 295 – Practicum Internship (6)		Required Program Core	DO THIS – Apply online for degree and
•	Media Communications 298 – Audio Video or Internet Capstone Project (3)		Required Program Core	graduation
			15 CREDIT HOURS	
	MINIMUM TOTAL:		63 CREDIT HOURS	
	PRC	OGRAM	ELECTIVES	
English 105 – Business Writing (3)		🗆 Ent	repreneurship 204 – Entrepreneurial Ma	rketing and Sales (3)
] En	ıglish 107 – Report Writing (3)	🗆 Me	Media Communications 224 – Broadcast Performance (3)	
] En	trepreneurship 201 – Introduction to Entrepreneurship (3)	🗆 Me	dia Communications 261 – Project Mana	agement and Team Dynamics (3)
] En	trepreneurship 202 – Opportunity Recognition Development (3)	🗆 Spe	ech 160 – Business and Professional Sp	beech (3)

□ Entrepreneurship 202 – Opportunity Recognition Development (3)

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### PATHWAY: Music Business

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Music Business. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). The BC program in Music Business prepares students for the study of the techniques and standards needed for a career as a manager, publisher, professional musician, or agent. Completion of the Music Business program can lead to employment with such businesses as recording companies, management firms, publishing companies, music festivals, or music production companies. Practical experience within the music industry is included. The field is highly competitive, but employment opportunities are expanding rapidly.

DEGREE CODE:

BC 0093

#### Choose your courses with your College Advisor.

Communications pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			
ENGLISH PLACEMENT	READING PLACEMENT		
□ ESL/FS Writing	□ ESL/FS Reading		
□ ESL/English 98	□ ESL/Reading 99		
□ ESL 99	□ ESL Reading 100		
□ ESL/English 100	□ Reading 125		
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#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Business 111– Introduction to Business (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
٠	Music 105 – Group Piano I (2)	Required Program Core	DO THIS – Meet with Music Business Coordinator in anticipation for Individual Project options
٠	Music 120 – Introduction to Music Business (3)	Required Program Core	(Music 225)
		8 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Business 231 – Marketing (3)	Required Program Core	
٠	• Music 102 – Music Theory I (3)	Required Program Core	COMPLETION of Basic Certificate in Music Business
٠	Music 111 – Aural and Keyboard Skills I (2)	Required Program Core	DO THIS – Go to career cen ter to explore both continued education and employment options
٠	Music 221 – Music Literature and History (3)	Required Program Core	DO THIS – Apply online for Basic Certificate
•	Music 225 – Individual Project (2)	Required Program Core	
		13 CREDIT HOURS	
	MINIMUM TOTAL:	21 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: DA (KK (MX OH) TR)



DEGREE CODE: AFA 0208

### **PATHWAY:** Music Education

#### Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

From Bach to blues to Bhangra, music is a universal language that is available to anyone willing to lend a hand, ear or voice. Music educators are passionate about developing their students' musical talents and guiding them in their pursuit of music careers. But they also enjoy helping all students have fun, develop discipline, and enrich their lives by learning to play music. Follow the music education pathway and learn how to teach music and music appreciation to students of various ages and abilities. You might find yourself taking courses in curriculum design, music theory, music history, classroom management, and technology for music teachers. People with degrees in music education can choose to become music teachers, recreational therapists, musicians, sound engineers, and more.

This is an **example course sequence** for students interested in pursuing Music Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Fine Arts (AFA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses the while in pre-degree	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Pathway Course	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	□ Music Courses: 105, 106, 107, 108,	Elective Courses
□ ESL 99	ESL/Reading 100	□ Mathematics 98	109, 114, 131, 150, 181	
ESL/English 100	□ Reading 125	□ Mathematics 99		

Human Sciences (Liberal Arts)

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İ	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	English 101 – Composition I (3)	Communications	
	Music 101 – Fundamentals of Music Theory (3) <b>OR</b> Music 102 – Theory I (3) and Music 111 – Aural/Keyboard (2)	Program Elective	
	Music 105 – Group Piano I (2)	Program Elective	DO THIS – Meet with advisor to confirm plans
	Music 181 – Applied Music Freshman I (2)	Program Elective	DO THIS – Begin research on four-year schools
	Music 183 – World Music (3)	Fine Arts (HD)	
	Physical/Life Sciences with NO Lab (3)	Physical/Life Sciences	
		15 CREDIT HOURS	
	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Speech 101 – Introduction to Speech (3)	Mathematics/Science	
	Music 102 – Theory I (3) and Music 111 – Aural/Keyboard (2) <b>OR</b> Music 103 – Theory II (3) and Music 112 – Aural/Keyboard II (2)	Program Elective	DO THIS – Mid-term check-in with advisor
	Music 106 – Group Piano II (2)	Program Elective	DO THIS – Visit your campus Transfer Center to discus
	Physical/Life Sciences with Lab (4)	Physical/Life Sciences	<ul> <li>options and create a short list of four-year schools for potential transfer</li> </ul>
	Music 182 – Applied Music Freshman II (2)	Program Elective	
	Any Music Ensemble (1-2)	Program Elective	
		17-18 CREDIT HOURS	
	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	English 102 – Composition II (3)	Communications	
	Music 103 – Theory II (3) and Music 112 – Aural/Keyboard II (2) <b>OR</b> Music 201 – Theory III (3) and Music 211 – Aural/Keyboard III (2)	Program Elective	DO THIS – Mid-term check-in with advisor
	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics 125 (4)	Mathematics	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid DO THIS – Prepare documentation for college applicat
	Music 281 – Applied Music Sophomore I (2)	Program Elective	
	Any Music Ensemble – optional (1-2)	Program Elective	
		15-16 CREDIT HOURS	
İ	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
	Music 201 – Theory III (3) and Music 211 – Aural/Keyboard III (2) <b>OR</b> Music 202 – Theory IV (3) and Music 212 – Aural/Keyboard IV (2)	Program Elective	COMPLETION of Associate in Fine Arts degree in Mus
	Music 282 – Applied Music Sophomore II (2)	Program Elective	Education DO THIS – Apply to four-year schools of your choice
	Music 221 – Music Literature and History (3)	Fine Arts	DO THIS – Apply to four year schools of year choice DO THIS – Apply online for degree and graduation
	Any Music Ensemble – optional (1-2) <b>OR</b> Child Development 101 – Human Growth and Development I (3)	Program Elective	
		14-16 CREDIT HOURS	
ä	MINIMUM TOTAL:	62 CREDIT HOURS	

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**Focus Area:** Human Sciences (Liberal Arts)



DEGREE CODE: AFA 0205

### **PATHWAY:** Music Performance

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

From Bach to blues to Bhangra, music is a universal language that is available to anyone willing to lend a hand, ear or voice. Music educators are passionate about developing their students' musical talents and guiding them in their pursuit of music careers. But they also enjoy helping all students have fun, develop discipline, and enrich their lives by learning to play music. Follow the music education pathway and learn how to teach music and music appreciation to students of various ages and abilities. You might find yourself taking courses in curriculum design, music theory, music history, classroom management, and technology for music teachers. People with degrees in music education can choose to become music teachers, recreational therapists, musicians, sound engineers, and more.

This is an **example course sequence** for students interested in pursuing Music Education. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Fine Arts (AFA) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Pathway Course	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	□ Music Courses: 105, 106, 107, 108,	Elective Courses
□ ESL 99	ESL/Reading 100	□ Mathematics 98	109, 114, 131, 150, 181	
ESL/English 100	□ Reading 125	□ Mathematics 99		

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	English 101 – Composition I (3)	Communications	
•	Music 101 – Fundamentals of Music Theory (3) <b>OR</b> Music 102 – Theory I (3) and Music 111 – Aural/Keyboard (2)	Program Elective	
٠	Music 105 – Group Piano I (2)	Program Elective	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
٠	Music 181 – Applied Music Freshman I (2)	Program Elective	DO THIS - Begin research on rour-year schools
٠	Music 183 – World Music (3)	Fine Arts (HD)	
٠	Physical/Life Sciences with NO Lab (3)	Physical/Life Sciences	
		15 CREDIT HOURS	
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Speech 101 – Introduction to Speech (3)	Mathematics/Science	
٠	Music 102 – Theory I (3) and Music 111 – Aural/Keyboard (2) <b>OR</b> Music 103 – Theory II (3) and Music 112 – Aural/Keyboard II (2)	Program Elective	DO THIS – Mid-term check-in with advisor
•	Music 106 – Group Piano II (2)	Program Elective	DO THIS – Visit your campus Transfer Center to discuss
•	Physical/Life Sciences with Lab (4)	Physical/Life Sciences	options and create a short list of four-year schools for potential transfer
٠	Music 182 – Applied Music Freshman II (2)	Program Elective	
٠	Any Music Ensemble (1-2)	Program Elective	
		17-18 CREDIT HOURS	

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	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	English 102 – Composition II (3)	Communications	
	Music 103 – Theory II (3) and Music 112 – Aural/Keyboard II (2) <b>OR</b> Music 201 – Theory III (3) and Music 211 – Aural/Keyboard III (2)	Program Elective	DO THIS – Mid-term check-in with advisor
	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics 125 (4)	Mathematics	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid DO THIS – Prepare documentation for college application
	Music 281 – Applied Music Sophomore I (2)	Program Elective	
	Any Music Ensemble – optional (1-2)	Program Elective	
		15-16 CREDIT HOURS	
	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
	Music 201 – Theory III (3) and Music 211 – Aural/Keyboard III (2) <b>OR</b> Music 202 – Theory IV (3) and Music 212 – Aural/Keyboard IV (2)	Program Elective	COMPLETION of Associate in Fine Arts degree in Music Performance
	Music 282 – Applied Music Sophomore II (2)	Program Elective	DO THIS – Apply to four-year schools of your choice
	Music 221 – Music Literature and History (3)	Fine Arts	DO THIS – Apply online for degree and graduation
	Any Music Ensemble – optional (1-2)	Program Elective	
		14-15 CREDIT HOURS	
_	MINIMUM TOTAL:	60 CREDIT HOURS	



#### DEGREE CODE: BC 0094

### This is an **example course sequence** for students interested in pursuing Music Technology. It does not represent a contract, nor does it guarantee gua

**PATHWAY:** Music Technology

does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). The BC program in Music Technology is the study of techniques and standards needed for careers as a recording engineer, producer, professional musician, or composer/ arranger. Completion of the certificate program can lead to employment with such businesses as advertising agencies, recording studios, recording companies, video game companies, publishing companies, radio stations, or as a free-lance artist. The field is highly competitive, but employment opportunities are expanding rapidly.

#### Choose your courses with your College Advisor.

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Communications pre-degree requirements. Placements bas	ed on COMPASS, ACT or department chair recommendation.
ENGLISH PLACEMENT	READING PLACEMENT
ESL/FS Writing	□ ESL/FS Reading
ESL/English 98	□ ESL/Reading 99
□ ESL 99	□ ESL Reading 100
ESL/English 100	□ Reading 125

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		PLAN FOR FULL-TIME STUDENTS ne students by adding more semesters.
SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Digital Multimedia 115 – Digital Soundtrack (3)	Required Program Core	
Music 101 – Fundamentals of Music Theory (3)	Required Program Core	
Music 105 – Group Piano I (2)	Required Program Core	DO THIS – Meet with Advisor to discuss academic goals and plan coursewo
Music 204 – Commercial Music Workshop (2)	Required Program Core	DO THIS – Go to Room 324 to take a Music Theory placement test if you ha had some previous Music Theory learning experience
Strongly Recommended: Music elective (2)		
Optional: English 101- Composition I (3)		
	10 CREDIT HOURS	
SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Music 102 – Music Theory I (3)	Required Program Core	
Music 106 – Group Piano II (2)	Required Program Core	
Music 111 – Aural and Keyboard Skills I (2)	Required Program Core	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss options and create
Music 205 – Commercial Music Workshop II (2)	Required Program Core	short list of four-year schools for potential transfer
Music 221 – Music Literature and History (3)	Required Program Core	
Strongly Recommended: Music elective (2)		
	12 CREDIT HOURS	
SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Music 103 – Music Theory II (3)	Communications	
Music 112 – Aural and Keyboard Skills II (2)	Program Elective	COMPLETION of Basic Certificate in Music Technology DO THIS – Apply online for Basic Certificate
Music 225 – Individual Project (2)	Mathematics	
	7 CREDIT HOURS	
MINIMUM TOT	AL: 29 CREDIT HOURS	

Human Sciences (Liberal Arts)



AA 0210

### **PATHWAY:** Philosophy

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Philosophy examines basic questions about such topics as the nature of existence and of knowledge. They also study the history of philosophy, learn how to use logic and argue their ideas, and use philosophy to better understand other fields. Philosophy prepares you for all sorts of careers, as you develop great skills in logic, problem solving, and creative thinking.

This is an **example course sequence** for students interested in pursuing Philosophy. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	English 101 – Composition I (3)	Communications	
٠	٠	Speech 101 – Fundamentals of Speech (3)	Communications	
٠	۰	World Language course (4)	Elective	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
•	٠	Program Elective (3)	Social/Behavioral Sciences	
٠	٠	Program Elective (3)	Humanities/Fine Arts (HD)	
			16 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	٠	English 102 – Composition II (3)	Communications	
•	٠	Physical Sciences course (4)	Physical Sciences	DO THIS – Mid-term check-in with advisor
٠	۰	World Language course (4)	Elective	DO THIS – Visit your campus Transfer Center to discuss options and create
٠	٠	Program Elective (3)	Social/Behavioral Sciences	a short list of four-year schools for potential transfer
٠	٠	Program Elective (3)	Humanities (HD)	
			17 CREDIT HOURS	
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Mathematics 118 – General Education Mathematics <b>OR</b> above (4)	Mathematics	
٠	٠	Fine Arts course (3)	Fine Arts	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year funding outlets such as
٠	٠	Social/Behavioral course (3)	Social/Behavioral Sciences	scholarships and aid
٠	•	Program Elective (3)	Program Elective	DO THIS – Prepare documentation for college application
٠	٠	Program Elective (3)	Program Elective	
			16 CREDIT HOURS	
			(continued on next p	age)

Human Sciences (Liberal Arts)

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D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	•	Life Sciences course (4)	Life Sciences	
٠	0	Program Elective (3)	Elective	COMPLETION of Associate in Arts degree in Philosophy
٠	0	Program Elective (3)	Elective	DO THIS – Apply to four-year schools of your choice DO THIS – Apply online for degree and graduation
٠	0	Program Elective (3)	Elective	
			13 CREDIT HOURS	
		ΜΙΝΙΜUΜ ΤΟΤΑ	AL: 62 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 😡 📧 ன 🖚



DEGREE CODE: AA 0210

### **PATHWAY:** Political Science

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Whether they're conservative or liberal, cynical or idealistic, one common characteristic among students interested in political science and government is their addiction to politics. If active engagement in the political system is for you, a political science emphasis is a great way to get started. Those interested in political science and government study the systems people set up to organize their societies, from neighborhoods to nations. If you are interested in a career in government, law, public policy, civic leadership, campaign organizing or even becoming the next president—political science might be just the ticket.

This is an **example course sequence** for students interested in pursuing Political Science. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	•	English 101 – Composition I (3)	Communications	
•	٠	Mathematics 118 or above (4)	Mathematics	
•	٠	Fine Arts course (3)	Fine Arts	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
•	٠	Social Science 102 – General course II (3)	Social/Behavioral Sciences	
•	0	Program Elective (3)	Program Elective	
			16 CREDIT HOURS	

Human Sciences (Liberal Arts)

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#### (continued from previous page) **SEMESTER 2** CATEGORY **ACHIEVEMENTS & NEXT ACTIONS** Speech 101 - Fundamentals of Speech (3) Communications Physical Sciences course (4) Physical Sciences DO THIS - Mid-term check-in with advisor DO THIS - Visit your campus Transfer Center to discuss options and Humanities course (3) Humanities (HD) create a short list of four-year schools for potential transfer Political Science 201 - National Government (3) Social/Behavioral Sciences Program Elective (3) Program Elective

				16 CREDIT HOURS	
D	GECC	SEMESTER 3		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	•	Life Sciences course (4)		Life Sciences	DO THIS – Mid-term check-in with advisor
٠	٠	English 102 – Composition II (3)		Communications	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year funding outlets such
٠	٠	Program Elective (3)		Social/Behavioral Sciences	as scholarships and aid DO THIS – Prepare documentation for college application
٠	•	World Language course (4)		Elective	DO THIS – Prepare documentation for conege application
				14 CREDIT HOURS	
D	GECC	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Humanities/Fine Arts course (3)		Humanities/ Fine Arts	
•	0	World Language course (4)		Elective	COMPLETION of Associate in Arts degree in Political Science
•	•	Program Elective (3)		Program Elective	DO THIS – Apply to four-year schools of your choice
٠	0	Program Elective (3)		Program Elective	DO THIS – Apply online for degree and graduation
•	0	Program Elective (3)		Program Elective	
				16 CREDIT HOURS	
			MINIMUM TOTAL:	62 CREDIT HOURS	

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (m) (m) (m) (m) (m) (m)



**DEGREE CODE:** 

AA 0210

**PATHWAY:** Psychology Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

The psychology pathway examines the way humans feel, think, and learn. Today's psychologists study all sorts of fascinating questions, such as: Why is learning a language as an infant easier than as a teenager? What are the roots of violence? What is the best way to help someone with depression, or grief? But psychologists also look on the bright side. They encourage, coach and motivate people to change their lives for the better.

This is an example course sequence for students interested in pursuing Psychology. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (May	□ College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		
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Human Sciences (Liberal Arts)

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# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters. GECC SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT ACTIONS English 101 – Composition I (3) Communications • Mathematics 125 - Introductory Statistics (4) Mathematics **DO THIS** – Meet with advisor to confirm plans Psychology 201 - General Psychology (3) Social/Behavioral Sciences • DO THIS - Begin research on four-year schools Social Science 101 - General course I (3) Social/Behavioral Sciences • • • Program Elective (3) Flective 16 CREDIT HOURS GECC **SEMESTER 2** CATEGORY ACHIEVEMENTS & NEXT ACTIONS • English 102 - Composition II (3) Communications Life Sciences course (4) Life Sciences DO THIS - Mid-term check-in with advisor DO THIS - Visit your campus Transfer Center to Speech 101 - Fundamentals of Speech (3) • Communications discuss options and create a short list of four-year schools for potential transfer • Fine Arts course (3) Fine Arts Humanities Humanities course (3) 16 CREDIT HOURS ACHIEVEMENTS & NEXT ACTIONS SEMESTER 3 CATEGORY Physical Sciences course (4) Physical Sciences DO THIS - Mid-term check-in with advisor DO THIS - Begin seeking additional four-year funding • Humanities/Fine Arts course (3) Humanities/Fine Arts outlets such as scholarships and aid • Program Elective (3) Elective DO THIS – Prepare documentation for college application . World Language course (4) Flective 14 CREDIT HOURS **SEMESTER 4** CATEGORY **ACHIEVEMENTS & NEXT ACTIONS** D Social Science course (3) Social/Behavioral Sciences (HD) COMPLETION of Associate in Arts degree in World Language course (4) Elective . Psychology Program Elective (3) Program Elective DO THIS - Apply to four-year schools of your choice • . DO THIS - Apply online for degree, and for . Program Elective (3) Program Elective graduation Program Elective (3) Program Elective • • **16 CREDIT HOURS** MINIMUM TOTAL: **62 CREDIT HOURS** 

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE

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Human Sciences (Liberal Arts)



AA 0210

## **PATHWAY:** Religious Studies

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you are fascinated by religious questions and traditions, and enjoy exploring many points of view, consider this area of study. In jobs that require relating to others, reaching out to them, building bridges, or incorporating many perspectives at once, knowledge of religion will provide an excellent foundation.

This is an **example course sequence** for students interested in pursuing Religious Studies. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	FS Mathematics I	□ Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Theater Arts 131, Fine Arts 104,	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	African-American Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	English 101 – Composition I (3)	Communications		
•	٠	Mathematics 125 – Introductory Statistics (4)	Mathematics	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools	
•	٠	Fine Arts course (3)	Fine Arts		
•	٠	Program Elective (3)	Humanities (HD)		
•	۰	Program Elective (3)	Elective		
			16 CREDIT HOURS		
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	Englist 102 – Composition II (3)	Communications		
•	٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS – Mid-term check-in with advisor	
•	٠	Physical Sciences course (4)	Physical Sciences	DO THIS – Visit your campus Transfer Center to discuss options and	
•	٠	Humanities Program Elective (3)	Humanities	create a short list of four-year schools for potential transfer	
•	٠	Social/Behavioral Sciences (HD) Program Elective (3)	Social/Behavioral Sciences (HD)		
			16 CREDIT HOURS		
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	٠	Life Sciences course (4)	Life Sciences	DO THIS – Mid-term check-in with advisor	
•	۰	Program Elective (3)	Program Elective	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year funding outlets such a	
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	scholarships and aid DO THIS – Prepare documentation for college application	
•	•	World Language course (4)	Elective		
			14 CREDIT HOURS		

Human Sciences (Liberal Arts)

#### (continued from previous page)

	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	•	Program Elective (3)	Elective	
	٠	World Language course (4)	Elective	COMPLETION of Associate in Arts degree in Religious Studies
	•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	DO THIS – Apply to four-year schools of your choice
•	٠	Program Elective (3)	Elective	DO THIS – Apply online for degree and graduation
	٠	Program Elective (3)	Elective	
16 CREDIT HOURS				
		MINIMUM TOTAL:	62 CREDIT HOURS	
			PROGRAM ELECTIVES	
An	thropolo	gy 202 – Cultural Anthropology (3)	_	– Islamic Scriptures: The Qur'an (3)
	ilosophv	108 – Philosophy of Religion (3)	□ Religion 106	- Comparative Religion I Eastern Religion (3)
		Religion 101 – Introduction to Religion (3)		
Ph		1 – Introduction to Religion (3)	Religion 107	<ul> <li>Comparative Religion II Western Religion (3)</li> </ul>
Ph Re	ligion 10	1 – Introduction to Religion (3) 2 – The Bible: Hebrew Old Testament (3)	5	– Comparative Religion II Western Religion (3) – Religion and Psychology (3)



DEGREE CODE: AA 0210

## **PATHWAY:** Theater Arts

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

If you've ever acted in a play, you know how much work it takes to put a production together. A theater pathway is your ticket to every corner of the theater world. Whether you specialize in acting or design, you'll learn in class, backstage, and onstage. You'll read, discuss, and write about all kinds of theatrical works. You'll also get your hands dirty applying what you learn in class as you build sets, design costumes, direct, or act in department productions.

This is an **example course sequence** for students interested in pursuing Theater Arts. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

As of July 2014, World Language courses are no longer a degree requirement. In the sequence below, World Language courses are called out as suggested electives. Please talk with your College Advisor to determine the best education plan for you.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	FS Mathematics I	Fine Arts/Humanities: (May	College Success
ESL/English 98	ESL/Reading 99	FS Mathematics II	choose 2) Art 103, Music 121, Theater Arts 131, Fine Arts 104,	World Languages
□ ESL 99	ESL/Reading 100	□ Mathematics 98	African-American Studies 101	□ Speech 143
ESL/English 100	□ Reading 125	□ Mathematics 99		□ Theater Art 130, 132, 133, 136, 137, 230, 232, 233, 235, 242, 252

Human Sciences (Liberal Arts)

#### (continued from previous page)

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 101 – Composition I (3)	Communications		
٠	Mathematics 118 – General Education Mathematics (4) <b>OR</b> Mathematics 125 – Introductory Statistics (4)	Mathematics		
٠	Theater Art 131 – Introduction to Theater (3) <b>OR</b> Theater Art 134 – Theater in the Modern World (3)	Fine Arts	DO THIS – Meet with advisor to confirm pla DO THIS – Begin research on four-year schu	
0	Theater Art 133 – Acting 1 (3)	Program Elective		
۰	Theater Art 130 – Stagecraft (3) <b>OR</b> Speech 143 – Training of Voice (3) <b>OR</b> Theater Art 242 – Improvisation (3)	Program Elective		
		16 CREDIT HOURS		
GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 102 – Composition II (3)	Communications		
٠	Life Sciences course (4)	Life Sciences	DO THIS – Mid-term check-in with advisor	
٠	Speech 101 – Fundamentals of Speech (3)	Communications	DO THIS – Visit your campus Transfer Center to discuss options and create a short list of for	
0	Theater Art 235: Acting 2 (3) OR Theater Art 137 Stage Lighting (3)	Program Elective	year schools for potential transfer	
٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)		
		16 CREDIT HOURS		
GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Physical Sciences course (4)	Physical Sciences		
0	Theater Art 136 – Stage Makeup (2) <b>OR</b> Theater Art 132 – Production, Direction and Management (4) <b>OR</b> Speech 144 – Oral Reading and Interpretation (2-3)	Program Elective	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-yea	
0	World Language course (4)	Elective	funding outlets such as scholarships and aid	
٠	Psychology 201 – General Psychology (3) <b>OR</b> Sociology 201 – Introduction to the Study of Society (3)	Social/Behavioral Sciences	DO THIS – Prepare documentation for colleg application	
0	Theater Art 242 – Improvisation (3) <b>OR</b> Program Elective (3)	Program Elective		
		16 CREDIT HOURS		
GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences		
٠	Theater Art 129 – Introduction to Theater History (3) <b>OR</b> Theater Art 131 – Introduction to Theater (3) <b>OR</b> Theater Art 134 – Theater in the Modern World (3) <b>OR</b> Literature 112 – Drama (3) <b>OR</b> Literature 211 – Shakespeare (3)	Fine Arts	COMPLETION of Associate in Arts degree in Theater Art DO THIS – Apply to four-year schools of your	
0	Speech 144 – Oral Reading and Interpretation (3) <b>OR</b> Theater Art 232: Play Production (3) <b>OR</b> Program Elective (3-4)	Program Elective	choice DO THIS – Apply online for degree and	
٠	World Language course (4)	Elective	graduation	
٠	Humanities course (3)	Humanities		
		16 CREDIT HOURS		
	MINIMUM TOTAL:	64 CREDIT HOURS		

PROGRAMS OF STUDY Human Sciences (Liberal Arts)



AA 0210

### **PATHWAY:** World Languages

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

If you'd love to change the world, but you don't know what to do-speak its languages! In this interdisciplinary pathway you will have the chance to study everything from Communications to Fine Art, human behavior to geography and anthropology, political science to philosophy-and of course, the languages the world speaks. In our global economy, this pathway is the first step toward a bachelor's degree which will prepare you for a career in international business, banking, government service, interpreting, or travel. World language study is also vital to jobs in healthcare professions like nursing, emergency services, criminal justice and social work.

This is an **example course sequence** for students interested in pursuing World Languages. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an AA degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

We strongly recommended that you complete the language sequence in consecutive semesters. If you wait a semester or more for the second course, you risk not being able to continue as prepared as possible in your language of interest.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (May	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Theater Arts 131, Fine Arts 104,	World Languages	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	African-American Studies 101		
ESL/English 100	□ Reading 125	□ Mathematics 99			

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	English 101 – Composition I (3)	Communications	
•	٠	Humanities course (3)	Humanities	
•	٠	Fine Arts course (3)	Fine Arts	DO THIS – Meet with advisor to confirm plans DO THIS – Begin research on four-year schools
•	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	
•	0	World Language course (3-4)	Elective	
			15-16 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	•	English 102 – Composition II (3)	Communications	
	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	DO THIS – Mid-term check-in with advisor
	٠	Life Sciences course (4)	Life Sciences	DO THIS – Visit your campus Transfer Center to discuss options
	٠	Speech 101 – Fundamentals of Speech (3)	Communications	and create a short list of four-year schools for potential transfer
	0	World Language course (3-4)	Elective	
			16-17 CREDIT HOURS	
)	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
	•	World Language course (3-4)	Elective	
	٠	Mathematics 118 or above (4)	Mathematics	DO THIS – Mid-term check-in with advisor
	٠	Fine Arts/Humanities course (3)	Fine Arts/Humanities	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid
	٠	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	DO THIS – Prepare documentation for college application
	0	Culture or History course relevant to language of study (3)	Program Elective	

16-17 CREDIT HOURS

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**D** = DEGREE // **AC** = ADVANCED CERTIFICATE // **BC** = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT **CCC.EDU** 

Human Sciences (Liberal Arts)

#### (continued from previous page)

GECC	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	World Language course (3-4)		Elective	
٠	Physical Sciences course (3)		Physical Sciences	COMPLETION of Associate in Arts degree in World Language
•	Elective (3)		Elective	DO THIS –Apply to four-year schools of your choice DO THIS – Apply online for degree and graduation
0	Elective (3)		Elective	
			12-13 CREDIT HOURS	
	MININ	MUM TOTAL: Pr	62 CREDIT HOURS	
	Choose el	Pr lectives based on th	ROGRAM ELECTIVES	
	Choose el	Pr lectives based on th	ROGRAM ELECTIVES	
	Choose el	Pr lectives based on th	ROGRAM ELECTIVES	
	Choose el	PF lectives based on th Colleges of Chicag	ROGRAM ELECTIVES the recommendations of your top go offers courses in the followin	
	Choose el	Pr lectives based on th Colleges of Chicag • Arabic	ROGRAM ELECTIVES the recommendations of your top go offers courses in the followin Japanese	



DEGREE CODES: AAS 0294 AC (Pup) 0295 BC (PuP) 0296 AC (PrP) 0319 BC (PrP) 0326

## PATHWAY: Criminal Justice: Private and Public Police

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Criminal Justice. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), an Advanced Certificate (AC) and an Associate in Applied Science (AAS) in Criminal Justice: Public Police (PuP), and a Basic Certificate and an Advanced Certificate in Criminal Justice: Private Police (PrP). One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Criminal Justice: Public Police is the study of theory and practice of contemporary criminal justice for those who plan careers as police officers or other criminal justice positions, as well as police who wish to advance in rank or into administrative levels of criminal justice.

The Advanced Certificate program in Criminal Justice: Private Police is focused on the study of theory and practices of current trends in private police services, criminal and civil law for private security officers. The program can lead to promotion to security directors, middle-management positions or self-employment.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (May	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	World Languages	
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Studies 101	Criminal Justice 102	
ESL/English 100	□ Reading 125	□ Mathematics 99	□ Mathematics/Science:	Criminal Justice 114	
			Biology 107 or Environmental Technology 107	Computer Information Systems 120	

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D	ACPRP	BCPRP	ACPUP	BCPUP	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
٠	•	٠	•	•	Criminal Justice 102 – Administration of Criminal Justice (3)	Required Program Core		
•	٠	0	٠	٠	Criminal Justice 114 – Administration of Juvenile Justice (3)	Required Program Core	For students at Daley, Criminal Justice 170	
•	٠	٠	•	0	English 101 – Composition I (3)	Communications	is used towards the basic and advanced certificates in Criminal Justice – Private Police	
•	•	•	•	0	Computer Information Systems 120 – Introduction to Required Program Microcomputers (3)		but is not required for the AAS. DO THIS – Meet with advisor to choose	
•	0	۰	٠	0	Mathematics/Science course (3-4) Mathematics/Science		general education courses, elective courses, basic and advanced certificate requirements.	
•	٠	٠	٠	0	Criminal Justice 170 – Scope and Purpose of Private Policing (3) Required Program Core			
						18-19 CREDIT HOURS		
D	ACPRP	BCPRP	ACPUP	BCPUP	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	•	•	•	Criminal Justice 202 – Issues in Criminal Justice (3)	Required Program Core		
•	٠	٠	•	•	Criminal Justice 211 – Introduction to Investigation (3)	Required Program Core	For students at Daley, Criminal Justice 172	
•	٠	٠	٠	٠	Criminal Justice 155 – Introduction to Corrections (3)	Required Program Core	and English 107 are used towards the basic	
•	٠	٠	•	•	English 107 – Report Writing (3) <b>OR</b> English 102 – Composition II	Required Program Core	and advanced certificates in Criminal Justice - Private Police but are not required for the AAS	
•	•	٠	٠	٥	Criminal Justice 172 – Management and Supervision of Private Policing (3)	Required Program Core		
						15 CREDIT HOURS		

Human Sciences (Liberal Arts)

#### (continued from previous page)

P		BCPRP		DOPUP			
ע	ACIM	BC	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	٠	•	•	•	Criminal Justice 221 – Police Organization and Management (3)	Required Program Core	- For students at Daley, Criminal Justice 174
•	٠	•	٠	•	Criminal Justice 222 – Professional Responsibility (3)	Required Program Core	is used towards the basic and advanced
•	٠	۰	٠	0	Criminal Justice 256 – Constitutional Law (3)	Required Program Core	certificates in Criminal Justice: Private Police but is not required for the AAS
•	٠	۰	٠	•	Criminal Justice 234 – Criminal Law and Procedure (3)	Required Program Core	COMPLETION of Basic Certificate in Criminal
•	•	0	٠	0	Political Science 201 – American Government (3) <b>OR</b> Psychology 201 – General Psychology (3) <b>OR</b> Sociology 201 – Introduction to Sociology (3)	Required Program Core	Justice: Public Police Services COMPLETION of Advanced Certificate in Criminal Justice: Public Police Services COMPLETION of Basic Certificate in Criminal
۰	٠	٠	۰	0	Criminal Justice 174 – Law for Private Police (3)	Required Program Core	Justice: Private Police Services COMPLETION of Advanced Certificate in

						18 CREDIT HOURS	
D	ACPRP	BCPRP	ACPUP	BCPUP	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	0	۰	0	General Education course (3)	General Education (HD)	
•	0	0	۰	0	Criminal Justice 250 – Introduction to Criminology (3)	Program Elective	COMPLETION of Associate in Applied
•	۰	0	•	۰	Social/Behavior Science course (3)	Social/Behavioral Sciences	Science in Criminal Justice: Public Police
•	0	0	0	0	Political Science 201 – American Government (3) <b>OR</b> Psychology 201 – General Psychology (3) <b>OR</b> Sociology 201 – Introduction to Sociology (3)	Required Program Core	Services DO THIS – Apply online for degree and graduation
•	0	0	۰	0	Humanities/Fine Arts course (3)	Humanities/Fine Arts	
						15 CREDIT HOURS	
					MINIMUM TOTAL:	66 CREDIT HOURS	

#### D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 😡 📧 👓 🐨 🐨



DEGREE CODES: AAS 0355 BC 0358

# **PATHWAY:** Emergency Management: Emergency Preparedness Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

Criminal Justice: Private Police Services

This is an **example course sequence** for students interested in Emergency Management and Emergency Preparedness. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Emergency Mangement: Emergency Preparedness and an Associate in Applied Science (AAS) Degree in Emergency Mangement: Emergency Preparedness. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Emergency Management was developed in response to a long recognized need for a systematized approach to preparing emergency managers. Following the recommendations of the model curriculum of the Federal Emergency Management Agency's Higher Education Program, students choose from one of the three Emergency Management program tracks: 1) Homeland Security, 2) Incident Command, or 3) Emergency Preparedness.

The Emergency Preparedness Basic Certificate is intended for those individuals whose function is in the planning and support sectors of the emergency response field. This is a broad field of activity as it addresses the common needs of all emergency situations, but includes the unique needs of specific types of emergencies, i.e., the needs of planning and response to a hurricane vs. a terrorist attack involving weapons of mass destruction.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.	College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Humanities (HD): African-	□ College Success	
ESL/English 98	ESL/Reading 99	FS Mathematics II	American Studies 101	Computer Information Systems 120	
□ ESL 99	ESL/Reading 100	Mathematics 98		Environmental Technology 103	
ESL/English 100	□ Reading 125	Mathematics 99		Environmental Technology 113	

#### (continued on next page)

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU (continued from previous page)

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Environmental Technology 100 – Introduction to Emergency Management (3)	Required Program Core	
٠	Environmental Technology 101 – Basic Skills in Emergency Management (3)	Required Program Core	DO THIS – Meet with advisor to choose general
٠	Program Elective (3-4)	Program Elective	education courses, elective courses, and basic
۰	English 101 – Composition I (3)	Communications	certificate requirements
۰	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
		15-16 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Environmental Technology 103 – Introduction to Emergency Planning (3)	Required Program Core	
•	Environmental Technology 108 – Mitigation Management (3)	Required Program Core	ALMOST halfway through Associate in Applied Scier degree
•	Environmental Technology 181 – Emergency Response Level I, II, III (3)	Required Program Core	ALMOST complete with Basic Certificate
0	Environmental Technology 112 – Disaster Response and Recovery (4)	Required Program Core	DO THIS – Meet with advisor to confirm plans for af graduation
•	General Education course (3)	General Education	
		16 CREDIT HOURS	
BC	SUMMER SEMESTER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Program Elective (3-4)	Program Elective	
•	Speech 101 – Fundamentals of Speech (3)	Communications	
		6-7 CREDIT HOURS	
BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Environmental Technology 113 – Emergency Resource Management (3)	Required Program Core	
•	Environmental Technology 203 – Advanced Emergency Planning (3)	Required Program Core	COMPLETION of Basic Certificate in Emergency
•	Environmental Technology 122 – Disaster Site Worker (3)	Required Program Core	Preparedness DO THIS – Go to Career Center to explore both
	Environmental Technology 225 – Psychology of Terrorism (3) <b>OR</b> 226 – Disaster Psychology (3)	Required Program Core	continued education and employment options DO THIS – Mid-term check-in with advisor
•	Chemistry 121 – Basic Chemistry I (4)	Mathematics/Science	
		16 CREDIT HOURS	
BC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Environmental Technology 123 – Chemical Emergency Response (3)	Required Program Core	COMPLETION of Appoints in Applied Drivers day
•	Environmental Technology 222 – Emergency Management Operations II (4)	Required Program Core	<ul> <li>COMPLETION of Associate in Applied Science degi in Emergency Management: Emergency Preparedness</li> </ul>
•	Program Elective (3-4)	Program Elective	<ul> <li>DO THIS – Apply online for degree, and for graduatien DO THIS – Meet with College Advisor to confirm</li> </ul>
	Humanities course (3)	Humanities (HD)	graduation preparedness

#### PROGRAM ELECTIVES

$\Box$ Computer Information Systems 116 – Introduction to Operating Systems (3)	□ Environmental Technology 121 – Introduction to Hazardous Materials Management (3)
$\Box$ Computer Security and Forensic Investigation 102 – Introduction to Information Security (4)	$\Box$ Environmental Technology 131 – Environmental Health and Safety (3)
$\Box$ Computer Security and Forensic Investigation 213 – Information Security Technology (3)	$\square$ Environmental Technology 141 –Site Investigation and Sampling (3)
Emergency Medical Technician 101 – EMT Basic (3)	Environmental Technology 181 – Emergency Response Level I, II, III (3)

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (DA) (TR) (HW) (WR)

TE Programs offered at

**Focus Area:** Human Sciences (Liberal Arts

**D** = DEGREE // **AC** = ADVANCED CERTIFICATE // **BC** = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT **CCC.EDU** 

Human Sciences (Liberal Arts)



DEGREE CODES: AAS 0355 BC 0356

# PATHWAY: Emergency Management: Homeland Security

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Emergency Management: Homeland Security. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Emergency Mangement: Homeland Security and an Associate in Applied Science (AAS) Degree in Emergency Mangement: Homeland Security. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Emergency Management was developed in response to a long recognized need for a systematized approach to preparing emergency managers. Following the recommendations of the model curriculum of the Federal Emergency Management Agency's Higher Education Program, students choose from one of the three Emergency Management program tracks: 1) Homeland Security, 2) Incident Command, or 3) Emergency Preparedness.

The Homeland Security Basic Certificate is designed to meet new federal requirements for those in law enforcement, emergency response, and public safety fields who perform response activities at the emergency scene relating to the needs of on-scene emergency response regardless of the type of emergency.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Computer Information Systems 120
□ ESL 99	ESL/Reading 100	Mathematics 98	Environmental Technology 103
ESL/English 100	□ Reading 125	□ Mathematics 99	Environmental Technology 113

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Environmental Technology 100 – Introduction to Emergency Management (3)	Required Program Core	
• •	Environmental Technology 101 – Basic Skills in Emergency Management (3)	Required Program Core	DO THIS – Meet with advisor to choose general
• •	Program Elective (3-4)	Program Elective	education courses, elective courses, and basic
• •	English 101 – Composition I (3)	Communications	certificate requirements
• •	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
		15-16 CREDIT HOURS	
D BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Environmental Technology 106 – Introduction to Terrorism (3)	Required Program Core	
• •	Environmental Technology 115 – Introduction to Weapons of Mass Destruction (3)	Required Program Core	ALMOST halfway through Associate in Applied Science degree
• •	Environmental Technology 105 – Introduction to Atmospheric Sciences (3)	Required Program Core	ALMOST complete with Basic Certificate
• •	Environmental Technology 112 – Disaster Response and Recovery (4)	Required Program Core	DO THIS – Meet with advisor to confirm plans for after graduation
• •	Computer Information Systems 120 – Introduction to Microcomputers (3)	General Education	
		16 CREDIT HOURS	
D BC	SUMMER SEMESTER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Program Elective (3-4)	Program Elective	
• •	Speech 101 – Fundamentals of Speech (3)	Communications	
		6-7 CREDIT HOURS	

Human Sciences (Liberal Arts)

#### (continued from previous page)

D BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Environmental Technology 205 – Terrorism Planning (3)	Required Program Core	
• •	Environmental Technology 215 – Advanced Weapons of Mass Destruction (3)	Required Program Core	COMPLETION of Basic Certificate in Homeland
• •	Environmental Technology 181 – Emergency Response Level I, II, III (3)	Required Program Core	Security DO THIS – Go to Career Center to explore both
••	Environmental Technology 225 – Psychology of Terrorism (3) <b>OR</b> 226 – Disaster Psychology (3)	Program Elective	continued education and employment options DO THIS – Mid-term check-in with advisor
••	Chemistry 121 – Basic Chemistry I (4)	Mathematics/Science	
		16 CREDIT HOURS	
DBC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Environmental Technology 122 – Disaster Site Worker (3)	Required Program Core	COMPLETION of Acceptate in Applied Science degree
• •	Environmental Technology 123 – Chemical Emergency Response (3)	Required Program Core	COMPLETION of Associate in Applied Science degree in Emergency Management: Homeland Security
••	Environmental Technology 222 – Emergency Management Operations II (4)	Program Elective	DO THIS – Apply online for degree and graduation DO THIS – Meet with College Advisor to confirm
• •	Humanities course (3)	Humanities (HD)	graduation preparedness
		13 CREDIT HOURS	
	MINIMUM TOTAL:	66 CREDIT HOURS	
	PROGRAM EL	ECTIVES	
🗆 Comp	outer Information Systems 116 – Introduction to Operating Systems (3) $\hfill \square$	Environmental Technology 12	21 – Introduction to Hazardous Materials Management (3)
🗆 Comp	outer Security and Forensic Investigation 102 – Introduction to Information Security (4) $\ \square$	Environmental Technology 1	31 – Environmental Health and Safety (3)

Computer Security and Forensic Investigation 213 – Information Security Technology (3) Environmental Technology 141 – Site Investigation and Sampling (3)

Environmental Technology 111 - Emergency Response Level I. II. III (3)

□ Emergency Medical Technician 101 – EMT Basic (3)



DEGREE CODES: AAS 0355 BC 0357

#### **PATHWAY:** Emergency Management: Incident Command Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Emergency Management: Incident Command. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Emergency Management: Incident Command and an Associate in Applied Science (AAS) Degree in Emergency Management: Incident Command. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. The AAS degree program in Emergency Management was developed in response to a long recognized need for a systematized approach to preparing emergency managers. Following the recommendations of the model curriculum of the Federal Emergency Management Agency's Higher Education Program, students choose from one of the three Emergency Management program tracks: 1) Homeland Security, 2) Incident Command, or 3) Emergency Preparedness.

The Incident Command Basic Certificate is designed to meet new federal requirements for those in law enforcement, emergency response, and public safety fields who perform response activities relating to the needs of on-scene emergency response regardless of the type of emergency.

#### Choose your courses with your College Advisor.

	I mathematics pre-degree re ASS, ACT or department cho	College-level courses that can be taken while in pre-degree courses.					
ENGLISH PLACEMENT	ENGLISH PLACEMENT READING PLACEMENT MATHEMATICS PLACEMENT		ELECTIVE COURSES				
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	College Success				
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Computer Information Systems 120				
□ ESL 99	ESL/Reading 100	□ Mathematics 98	Environmental Technology 102				
ESL/English 100	Reading 125	□ Mathematics 99	Environmental Technology 111				
	(continued on payt page)						

Human Sciences (Liberal Arts)

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#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the peeds of part-time students by adding more semesters

•			
	Environmental Technology 100 – Introduction to Emergency Management (3)	Required Program Core	
٠	Environmental Technology 101 – Basic Skills in Emergency Management (3)	Required Program Core	
0	Program Elective (3-4)	Program Elective	DO THIS – Meet with advisor to choose general education courses, elective courses, and basic certificate requirements
0	English 101 – Composition I (3)	Communications	
0	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
		15-16 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Environmental Technology 102 – Leadership, Influence and Communication (3)	Required Program Core	
٠	Environmental Technology 112 – Disaster Response and Recovery (4)	Required Program Core	ALMOST halfway through Associate in Applied Science degree
•	Environmental Technology 122 – Disaster Site Worker (3)	Required Program Core	ALMOST complete with Basic Certificate
•	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans for after graduation
•	Chemistry 121 – Basic Chemistry I (4)	Mathematics/Science	
		17 CREDIT HOURS	
BC	SUMMER SEMESTER	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Program Elective (3-4)	Program Elective	
•	Speech 101 – Fundamentals of Speech (3)	Communications	
		6-7 CREDIT HOURS	
BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Environmental Technology 111 – Basic Incident Command (3)	Required Program Core	
٠	Environmental Technology 212 – Advanced Incident Command (3)	Required Program Core	COMPLETION of Basic Certificate in Incident Command
٠	Environmental Technology 221 – Emergency Management Operations I (3)	Required Program Core	DO THIS – Go to Career Center to explore both continued
۰	Environmental Technology 181 – Emergency Response Level I, II, III (3)	Program Elective	education and employment options DO THIS – Mid-term check-in with advisor
0	Environmental Technology 225 – Psychology of Terrorism (3) <b>OR</b> 226 – Disaster Psychology (3)	Required Program Core	
		16 CREDIT HOURS	
BC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
0	Environmental Technology 123 – Chemical Emergency Response (3)	Required Program Core	COMPLETION of Associate in Applied Science in Emergen
0	Environmental Technology 222 – Emergency Management Operations II (4)	Required Program Core	Management: Incident Command
0	Program Elective (3-4)	Program Elective	<ul> <li>DO THIS – Apply online for degree and graduation</li> <li>DO THIS – Meet with College Advisor to confirm graduatior</li> </ul>
0	Humanities course (3)	Humanities (HD)	preparedness
		13-14 CREDIT HOURS	
	MINIMUM TOTAL:	66 CREDIT HOURS	

Computer Security and Forensic Investigation 213 – Information Security Technology (3) Environmental Technology 141 – Site Investigation and Sampling (3)

□ Emergency Medical Technician 101 – EMT Basic (3)

Environmental Technology 181 – Emergency Response Level I, II, III (3)

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (ms) (ms) (ms) (ms)

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU



**PATHWAY:** Unarmed Security Guard

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning an Unarmed Security Guard Basic Certificate. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability. In this comprehensive 20-hour Unarmed Security Guard certificate program, students will cover officer training as an introduction to public security and basic patrol tactics.

DEGREE CODE: BC 0898

#### Choose your courses with your College Advisor.

	SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.					
BC	BC SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT ACTIONS					
•	Trade/Industrial/Trans 119 – Unarmed Security Guard (2)     Required Program Core		COMPLETION of Basic Certificate in Unarmed Security Guard DO THIS – Meet with advisor to discuss academic goals and plan coursework DO THIS – Apply online for basic certificate			
	MINIMUM TOTAL:	2 CREDIT HOURS				
D	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (MAX) (DH) (TB) (HW) (WB)					

# PROGRAMS OF STUDY Natural Sciences



# NATURAL SCIENCES

#### COLLEGE TO CAREERS LOCATION: HARRY S TRUMAN COLLEGE

Since the time of the Ancient Greeks, people have been experimenting in attempt to define the laws that govern the biological and physical world. Thousands of years later, the field of science has reached frontiers that would boggle the minds of the very first scientists. Science is used to plumb the depths of the ocean, to peer into the smallest building blocks of the human body, to look outward millions of miles into the cosmos and to engineer complex mechanical structures. Some scientists call into question our very perception of time and space. The vast majority of careers in this field will require at least a Bachelor's degree, so if you are interested in transferring to a four-year school to pursue a career in mathematics, science, or engineering, you should begin in Life and Physical Sciences.

### DEGREE AND CERTIFICATE PATHWAYS OFFERED

		D	AC	BC
Biology (pg. 167)		٠	0	۰
Biotechnology (pg. 212)		٠	0	۰
Chemical Laboratory Technology	<b>ogy</b> (pg. 213)	٠	0	۰
Chemistry (pg. 168)		٠	0	٠
Engineering and Physics (pg.	170)	٠	0	٠
Environmental Biology (pg. 17	(1)	٠	0	٠
Environmental Technology (pg	ı. 173)	٠	0	٠
Geology, Earth Science, Earth Science (GeoSciences) (pg. 1		•	٥	0
Horticulture (Sustainable Urba	<b>an)</b> (pg. 176)	٠	٠	٠
Mathematics (pg. 177)		٠	0	۰
Students in Life and Physical Sciences	may take classes like the follo	wing:		
English 101	Composition I May require taking English rea	adiness course	S	
Mathematics 207	al Geometry	/1		
Biology 121	Biology I			
Chemistry 201	General Chemistry I			
	EDTIEICATE // BC - BASIC (		с /	



AS 0211

## PATHWAY: Biology

#### Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

When you think of life on earth, your first thoughts are probably about familiar animals, your pet dog or cat, the bird you see in the tree outside your window. But that is really only a small sample of all the types of life on our planet, which include plants, bacteria, fungi, and animals in a vast array of body forms and types. Biology is the study of life, individual organisms, their communities, and the systems, cells, and processes that make up living matter. With an Associate in Science from City Colleges of Chicago you can transfer to a four-year college as a junior, obtain your bachelor's degree and work in fields like biochemistry, genetics, marine biology, zoology, ecology and much more.

This is an **example course sequence** for students interested in pursuing Biology. This pathway does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	ESL/FS Reading	FS Mathematics I	Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American Studies 101		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	Reading 125	□ Mathematics 99			

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

			5
D GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	English 101 – Composition I (3)	Communications	
• •	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	DO THIS – Meet with advisor to discuss academic goals
• •	Mathematics 207 – Calculus I (5) Prerequisite: Mathematics 143 – PreCalculus (6)	Mathematics	and plan coursework
• •	Biology 121 – Biology 1 (5)	Life Sciences	
		16 CREDIT HOURS	
D GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	English 102 – Composition II (3)	Communications	
•	Biology 122 – Biology II (5)	Mathematics/Sciences	
• •	Fine Arts course (3)	Fine Arts	ALMOST halfway through Associate in Science degree DO THIS – Meet with advisor to confirm plans
• •	Speech 101 – Fundamentals of Speech (3)	Communications	
• •	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	
		17 CREDIT HOURS	
D GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	Program Elective (4)	Mathematics/Sciences	
• •	Social/Behavioral Sciences (3)	Social/Behavioral Sciences (HD)	DO THIS – Go to Career Center to explore both continued
• •	Humanities course (3)	Humanities	<ul> <li>education and employment options</li> <li>DO THIS – Mid-term check-in with advisor</li> </ul>
• •	Chemistry 201 – General Chemistry I (5)	Physical Sciences	
		15 CREDIT HOURS	

Natural Sciences

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GE	cc	SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•		Humanities/Fine Arts course (3)		Humanities/Fine Arts	
0		Program Elective (4)		Program Elective	COMPLETION of Associate in Science degree in Biology
0		Program Elective (4)		Program Elective	DO THIS – Apply online for degree and graduation
0		Chemistry 203 – General Chemistry II (5)		Mathematics/Sciences	
				16 CREDIT HOURS	
		MINI	NUM TOTAL:	64 CREDIT HOURS	
			PROG	RAM ELECTIVES	
	Bic	ology 226 – Human Structure and Function I (4)		_	- Survey of Organic and Biochemistry (4)
	Bic	ology 227 – Human Structure and Function II (4)		□ Mathematics 20	07 – Calculus and Analytic Geometry I (5)
	Bic	ology 241 – Genetics (3-4)		□ Mathematics 20	08 – Calculus and Analytic Geometry II (5)
	Bic	ology 242 – Evolution (2-3)		Microbiology 23	33 – General Microbiology (4)
	Bic	ology 251 – Molecular Biology I (4)			d 232 – General Physics I: Mechanics and Wave Motion (4) a II: Electricity and Magnetism (4)
	Bo	tany 201 – General Botany I (4)			d 236 – Engineering Physics I: Mechanics and Wave Motion ( J Physics II: Electricity and Magnetism (5)
	Ch	emistry 207 – Organic Chemistry II (6)		Physics 237 – E	Engineering Physics III: Heat Light and Modern Physics (5)



DEGREE CODE: AGS 0203

## **PATHWAY:** Chemistry

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

When you think of chemistry, you might think of atoms and bonds, bubbling beakers and smoking test tubes. In reality, chemistry students use mathematics, theory, and experimentation to study the matter that makes up physical substances. People working in the field of chemistry make valuable contributions in a range of fields, including medicine, biology, psychology, and geology. Follow the chemistry pathway and you'll explore many different topics, from the chemical basis for life to the environmental problems caused by chemicals. The chemistry pathway leads to an associate degree which will allow you to transfer as a junior to a four-year college to complete your bachelor's degree. You might become a pharmacist, scientist, forensics specialist, food scientist, dentist, materials engineer or hazardous materials specialist.

This is an **example course sequence** for students interested in earning a degree in Chemistry. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in General Studies (AGS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

#### Choose your courses with your College Advisor.

	Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				rses that can be taken degree courses.	
	ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
	□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (choose 1)	College Success	
Sé	ESL/English 98	ESL/Reading 99	FS Mathematics II	Art 103, Music 121, Fine Arts 104; African-American Studies 101		
ience	□ ESL 99	ESL Reading 100	□ Mathematics 98			
Sc	ESL/English 100	□ Reading 125	□ Mathematics 99			

PROGRAMS OF STUDY Natural Sciences

#### (continued from previous page)

SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
English 101 – Composition I (3)	Communications	
Chemistry 201 – General Chemistry I (5) Prerequisite: Chemistry 121 – Basic Chemistry (4) <b>OR</b> High School Chemistry	Mathematics/Sciences	DO THIS – Meet with advisor to confirm plans
Mathematics 207 – Calculus and Analytic Geometry I (5) Prerequisite: Mathematics 140 – College Algebra (4)/Mathematics 141 – Plane Trigonometry (3) OR Mathematics 143 – Pre Calculus (6)	Mathematics/Sciences	DO THIS – Begin research on four-year schools
Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	
	16 CREDIT HOURS	
SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
English 102 – Composition II (3)	Elective	
Chemistry 203 – General Chemistry II (5)	Elective	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss optio
Mathematics 208 – Calculus and Analytic Geometry II (5)	Elective	and create a short list of four-year schools for potential transfer
Humanities/Fine Arts course (3)	Fine Arts/Humanities	
	16 CREDIT HOURS	
SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Chemistry 205 – Organic Chemistry I (6)	Elective	DO THIS – Mid-term check-in with advisor
Physics 221 – Mechanics, Waves and Heat (5)*	Elective	DO THIS – Begin seeking additional four-year funding outlets such as scholarships and aid
Social/Behavioral Sciences course (3)	Social/Behavioral Sciences	DO THIS – Prepare documentation
	14 CREDIT HOURS	
SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
Chemistry 207 – Organic Chemistry II (6)	Mathematics/Sciences	COMPLETION of Associate in General Studies degree in
Physics 222 – Electricity, Light and Modern Physics $(5)^{\star}$	Elective	Chemistry DO THIS – Apply online for degree and graduation
Humanities/Fine Arts course (3) Optional: Students interested in a BS in Chemistry should take Mathematics 209 – Calculus and Analytic Geometry III (5)	Humanities/Fine Arts Elective	*Students interested in a BS in chemistry rather than a BA should substitute Physics 235/236 for Physics 221/222
	14-19 CREDIT HOURS	
MINIMUM TOTAL:	60 CREDIT HOURS	

Natural Sciences



## **PATHWAY:** Engineering and Physics

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Engineering or Physics. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Engineering Science (AES) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.		
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American Studies 101		
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	□ Reading 125	□ Mathematics 99			

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	English 101 – Composition I (3)	Communications	
•	Chemistry 201 – General Chemistry I (5) Prerequisite: Chem 121- Basic Chemistry (4) <b>0R</b> high-school chemistry equivalency	Physical Sciences	DO THIS – Meet with advisor to confirm plans
•	Mathematics 207 – Calculus and Analytic Geometry I (5) Prerequisite: Mathematics 140 – College Algebra (4)/Mathematics 141 – Plane Trignometry (3) <b>OR</b> Mathematics 143 – Pre Calculus (6)	Mathematics	DO THIS – Begin research on four-year schools
•	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)	
		16 CREDIT HOURS	
D	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Mathematics 208 – Calculus II (5)	Mathematics	Do The Midden charles with address
•	Physics 235 – Engineering Physics I (5)	Physical Sciences	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center to discuss
•	English 102 – Composition II (3)	Communications	options and create a short list of four-year schools for
•	Engineering 190 – Computer Applications in Engineering (3)	Required Program Core	potential transfer
		16 CREDIT HOURS	
D	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Economics 202 – Principles of Econmoics II (3)	Social/Behavioral Sciences	DO THIS – Mid-term check-in with advisor
•	Mathematics 209 – Calculus III (5)	Required Program Core	DO THIS – Begin seeking additional four-year funding
•	Physics 236 – Engineering Physics II (5)	Required Program Core	<ul> <li>outlets such as scholarships and aid</li> <li>DO THIS – Begin prepping documentation for college</li> </ul>
٠	Program Elective course (3-5)	Program Elective	application
		16-18 CREDIT HOURS	

## PROGRAMS OF STUDY Natural Sciences

#### (continued from previous page)

SEMESTER 4		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
Mathematics 210 – Differential Equations (3)		Required Program Core		
Device 007 Encine anima Device III (E)		<ul> <li>COMPLETION of Associate in Engineering Science degree in Engineering and Physics</li> </ul>		
Program Elective course (5)			DO THIS – Apply to four-year schools of your choice DO THIS – Apply online for degree and graduation	
Program Elective course (3-5)		Program Elective		
		16-18 CREDIT HOURS		
MINIM	UM TOTAL:	64 CREDIT HOURS		
	PROGR	RAM ELECTIVES		
Physics 215 – Statics (3)		Engineering 215	5 – Electrical Circuit Analysis (5)	
Physics 216 – Dynamics (3)		□ Engineering 25	0 – Engineering Projects (1-2)	
□ Physics 217 – Mechanics of Materials (3)		□ Chemistry 203	– General Chemistry II (5)	
	n (2)	Electronics 206	6 – Digital Circuits and Systems (4)	
Engineering 111 – Introduction to the Engineering professio	1 (2)			



DEGREE CODE: AS 0211

### **PATHWAY:** Environmental Biology

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

Ever been told you can't see the forest from the trees? When environmental biologists get to work, they not only look at the trees – they look at the animals, the rocks, the soil, and the air. The environmental biology pathway studies the web of living and nonliving things in an environment to understand how the whole system works. Studying environmental biology, you can later transfer to a four-year university as a junior, obtain your bachelor's degree and work in fields like environmental engineering, forestry, wildlife preservation or national park administration.

This is an **example course sequence** for students interested in earning a degree in Environmental Biology. This pathway does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken -degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104: African-American	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99		

**Natural Sciences** 

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### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

GEC	С_	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		English 101 – Composition I (3)	Communications		
٠		Mathematics 207 – Calculus and Analytic Geometry I (5)	Mathematics	-	
٠		Biology 119 – Environmental Biology (4)	Life Sciences	DO THIS Mast with advisor to confirm plana	
•		African-American Studies 101 – Introduction to African-American Studies (3) <b>OR</b> Anthropology 202 – Cultural Anthropology (3) <b>OR</b> History 215 – History of Latin America (3) <b>OR</b> History 247 – African History to Colonial Period (3) <b>OR</b> Literature 121 – Contemporary African-American Literature (3) <b>OR</b> Literature 150 – Women's Literature (3)	Humanities or Social/Behavioral Sciences (HD)	<ul> <li>DO THIS – Meet with advisor to confirm plans</li> <li>DO THIS – Begin research on four-year schools</li> </ul>	
			15 CREDIT HOURS		
GEC	С	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		Biology 121 – Biology I (5)	Mathematics/Sciences		
٠		English 102 – Composition II (3)	Communications	DO THIS – Mid-term check-in with advisor DO THIS – Visit your campus Transfer Center discuss options and create a short list of four-y schools for potential transfer	
۰		Speech 101 – Fundamentals of Speech Communication (3)	Communications		
٠		Fine Arts course (3)	Fine Arts		
•		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences		
			17 CREDIT HOURS		
GEC	С	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
0		Biology 122 – Biology II (5)	Mathematics/Sciences		
٠		Chemistry 201 – General Chemistry (5)	Physical Sciences	DO THIS – Mid-term check-in with advisor DO THIS – Begin seeking additional four-year	
٠		Humanities course (3)	Humanities	funding such as scholarships and aid DO THIS – Prepare documentation	
٠		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences		
			16 CREDIT HOURS		
GEC	С	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
0		Chemistry 203 – General Chemistry II (5)	Physical Sciences		
٠		Humanities course (3) <b>OR</b> Social/Behavioral Sciences course (3)	Humanities or Social/ Behavioral Sciences	COMPLETION of Associate in Science degree i	
		A minimum of 9 credit hours concentration electives, choose only from:	:	Environmental Biology	
0		Biology 236 – Environmental Biology II (4)	Elective	DO THIS – Apply to four-year schools of your choice	
٥		Biology 299 – Environmental Biology Internship (3)	Elective	DO THIS – Apply online for degree and graduati	
٥		Biology 299 – Environmental Biology Research (3)	Elective		
0		Microbiology 236 - Environmental Microbiology (4)	Elective		
			16 CREDIT HOURS		
		MINIMUM TOTAL:	64 CREDIT HOURS		

PROGRAMS OF STUDY Natural Sciences



DEGREE CODES: AAS 0160 BC 0161

### **PATHWAY:** Environmental Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in environmental technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) and an Associate in Applied Science (AAS) degree in Environmental Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Environmental Technology prepares students with the skills and knowledge needed to participate in environmental careers including environmental compliance in public and private sector organizations, pollution prevention, environmental remediation, workplace health and safety, and emergency response preparedness. You will learn to develop procedures for proper hazardous materials handling techniques and design training programs used to implement existing and future regulatory requirements to ensure compliance. Upon graduation, you will be prepared to work in the health and safety field in such positions as compliance officer, environmental safety specialist, laboratory technician, hazardous materials emergency response technician, and environmental coordinator.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	□ Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	Computer Information Systems 120
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	Reading 125	□ Mathematics 99		

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

	· · · · · · · · · · · · · · · · · · ·			
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 101 – Composition I (3)	Communications		
•	Chemistry 121 – Basic Chemistry I (4)	Mathematics/Science	DO THIS – Meet with advisor to discuss	
•	Mathematics 118 – General Education Mathematics (4) OR above	Required Program Core	academic goals and plan coursework	
•	Environmental Technology 121 – Introduction to Hazardous Materials Management (3)	Required Program Core		
		14 CREDIT HOURS		
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	English 102 – Composition II (3) <b>OR</b> English 107 – Report Writing (3)	Required Program Core	ALLACOT holfway through Associate in	
٠	Biology 121 – Biology I (4)	Program Prerequisiteuisite	ALMOST halfway through Associate in Applied Science degree DO THIS – Meet with advisor to confirm plans for after graduation	
•	Environmental Technology 131 – Environmental Health and Safety (3)	Required Program Core		
٠	Environmental Technology 141 – Site Investigation and Sampling (3)	Required Program Core		
		13 CREDIT HOURS		
BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	Biology 226 – Human Structure and Function I (4)	Required Program Core		
٠	Speech 101 – Fundamentals of Speech Communication (3)	Communications	<b>DO THIS</b> – Go to both Transfer Center an Career Center to explore both continued	
٠	Environmental Technology 151 – Introduction to Environmental Laws and Policy (3)	Required Program Core	education and employment options	
٠	Environmental Technology 211 – Recycling and Waste Minimization (3)	Required Program Core	DO THIS – Meet with advisor to confirm plans for after graduation	
۰	Biology 119 – Environmental Biology (4)	Required Program Core		
		17 CREDIT HOURS		

Natural Sciences

#### (continued from previous page)

D	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences		
•	•	Environmental Technology 175 – Hazardous Material Handling and Transportation (3)	Required Program Core	COMPLETION of Basic Certificate in	
•	٠	Environmental Technology 241 – Environmental Sampling (4)	Required Program Core	Environmental Technology	
•	0	Environmental Technology 243 – Environmental Analysis (4)	Required Program Core		
			14 CREDIT HOURS		
D	BC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•	•	Program Elective (4)	Program Elective	COMPLETION Completion of Associate in Applied Science degree in Environmental Technology DO THIS – Apply online for degree and	
	0	Program Elective (4)	Program Elective		
	0	Humanities/Fine Arts course (3)	Humanities/Fine Arts (HD)		
•	0	Computer Information Systems 120 – Introduction to Microcomputers (3)	General Education	graduation	
			14 CREDIT HOURS		
		MINIMUM TOTAL:	72 CREDIT HOURS		
		PROGRAM ELECTIV	ES		
		AAS BC Students should meet with a College Adviso	r for calcotion of algotive courses		

AAS, BC Students should meet with a College Advisor for selection of elective courses.

□ 100 level Environmental Technology electives □ 200 level Environmental Technology electives

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 04 (MX 04) (79 (HW 07)



DEGREE CODE: AS 0211

## PATHWAY: Geology, Earth Science, Earth, and Environmental Science (GeoSciences)

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

As a geology student, you won't just study rocks, you'll explore the Earth's history and gain valuable insight into some of today's most pressing concerns, such as global climate change. You'll study the Earth's treasures, such as fossils and gems, as well as its dangers, such as volcanoes and earthquakes. You might find yourself becoming a geoscientist, a meteorologist, a mining engineer, or a geological engineer at an oil company.

This is an **example course sequence** for students interested in pursuing Geology, Earth Science, Earth and Environmental Science. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

		a mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
	ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
	□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	□ College Success
lces	ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	
Scier	□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	
	ESL/English 100	□ Reading 125	□ Mathematics 99		

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#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters. SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT ACTIONS GECC English 101 - Composition I (3) Communications Geology 201 - Physical Geology (4) Physical Sciences DO THIS - Meet with advisor to discuss academic goals Mathematics 207 - Calculus and Analytic Geometry I (5) and plan coursework COMPASS-based placement or prerequisite: Mathematics 140 – College Algebra (4)/ Mathematics Mathematics 141 - Plane Trigonometry (3) OR Mathematics 143 - Precalculus (6) Social/Behavioral Sciences (HD) Social Sciences course (3) 15 CREDIT HOURS **SEMESTER 2** CATEGORY **ACHIEVEMENTS & NEXT ACTIONS** English 102 - Composition II (3) • Communications Biology 121 - Biology I (5) • Life Sciences ALMOST halfway through Associate in Science degree Mathematics 208 - Calculus and Analytic Geometry II (5) OR DO THIS - Meet with advisor to confirm plans Mathematics/Sciences Mathematics 125 - Introductory Statistics (4) Social Sciences course (3) Social/Behavioral Sciences 15-16 CREDIT HOURS GECC SEMESTER 3 CATEGORY ACHIEVEMENTS & NEXT ACTIONS • Speech 101 - Fundamentals of Speech (3) Communications Social/Behavioral Sciences course (3) Social/Behavioral Sciences DO THIS - Go to Career Center to explore both continued Chemistry 201 - General Chemistry I (5) Mathematics/Sciences education and employment options Prerequisite: Chemistry 121 - Basic Chemistry (4) OR high-school chemistry equivalency DO THIS - Mid-term check-in with advisor • Humanities/Fine Arts course (3) Humanities • • Physical Sciences Elective (3-4) Elective 17-18 CREDIT HOURS GECC **SEMESTER 4** CATEGORY **ACHIEVEMENTS & NEXT ACTIONS** Fine Arts course (3) Fine Arts COMPLETION of Associate in Science degree in Geology, . Humanities/Fine Arts course (3) Humanities/Fine Arts Earth Science, Earth and Environmental Science Chemistry 203 - General Chemistry II (5) Mathematics/Sciences DO THIS - Apply online for degree and graduation Physics 235 - Engineering Physics I: Mechanics and Waves Motion (5) Elective . **16 CREDIT HOURS 63 CREDIT HOURS MINIMUM TOTAL:** D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 🔤 ඟ 😡 🖓 🕬 🕬

# PROGRAMS OF STUDY Natural Sciences



AC 0828

## PATHWAY: Horticulture (Sustainable Urban)

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Horticulture (Sustainable Urban). It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC). The Sustainable Urban Horticulture certificate program is designed to provide students with cutting edge opportunities in the area of green technologies. Topics will include green roofs, xeriscaping, rain gardens, and other new emerging technologies in the green industry.

#### Choose your courses with your College Advisor.

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

	ade/Industrial/Transportation 136 – Basic Horticulture (3) ade/Industrial/Transportation 138 – Horticultural Plant Science (3)	Required Program Core Required Program Core	DO THIS – Meet with advisor to confirm plans	
	ade/Industrial/Transportation 138 – Horticultural Plant Science (3)	Required Program Core		
AC		nequilea i logiani cole		
AC		6 CREDIT HOURS		
	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• Trac	ade/Industrial/Transportation 137 – Managing Urban Green Space (3)	Required Program Core		
• Trac	ade/Industrial/Transportation 140 – Greenhouse Crop Production (4)	Required Program Core		
• Trac	ade/Industrial/Transportation 141 – Soil Fertility and Assessment (3)	Required Program Core		
		10 CREDIT HOURS		
AC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• Trac	ade/Industrial/Transportation 139 – Urban Horticultural Floral (3)	Required Program Core		
• Trac	ade/Industrial/Transportation 142 – Management of Plant and Animal Invasion (3)	Required Program Core	DO THIS – Mid-term check-in with advisor	
• Trac	ade/Industrial/Transportation 143 – Sustainable Farming Practices (4)	Required Program Core		
		10 CREDIT HOURS		
AC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• Trac	ade/Industrial/Transportation 144 – Practicum/Internship (5)	Required Program Core	COMPLETION of Advanced Certificate in Horticulture (Sustainable Urban) DO THIS – Apply online for the advanced certificate	
		5 CREDIT HOURS		
	MINIMUM TOTAL:	31 CREDIT HOURS		



### **PATHWAY:** Mathematics

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

Most of us are comfortable using everyday mathematics, but higher level mathematics, such as calculus, may seem mysterious, a completely unfamiliar language. As a mathematics student, you'll study this language and learn how to use it to describe the world. You'll explore calculus, modern algebra, and other high-level mathematics in the purest light. If you love to solve puzzles, enjoy finding patterns and discovering whether something is true or false, this could be the pathway for you. If it all adds up, you might become a computer scientist, a mathematics instructor, a financial analyst, a mathematician, a statistician and more.

This is an **example course sequence** for students interested in pursuing Mathematics. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

	d mathematics pre-degree ASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American	
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	
ESL/English 100	□ Reading 125	□ Mathematics 99	□ Life Sciences – Biology 107	•

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

GEC	C	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		English 101 – Composition I (3)	Communications		
•		Mathematics 207 – Calculus and Analytic Geometry I (5) COMPASS-based placement or prerequisite: Mathematics 140 – College Algebra (4)/ Mathematics 141 – Plane Trigonometry (3) <b>OR</b> Mathematics 143 – Precalculus (6)	Mathematics	DO THIS – Meet with advisor to discuss academic goals and	
•		Fine Arts course (3)	Fine Arts	plan coursework	
•		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences		
•		Speech 101 – Fundamentals of Speech (3)	Communications		
			17 CREDIT HOURS		
GEC	C	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		English 102 – Composition II (3)	Communications		
•		Mathematics 208 – Calculus and Analytic Geometry II (5)	Mathematics/Sciences	ALMOST halfway through Associate in Science degree	
•		Physics 235 – Engineering Physics I: Mechanics and Wave Motion (5)	Mathematics/Sciences	DO THIS – Meet with advisor to confirm plans	
•		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences		
			16 CREDIT HOURS		
GEC	C	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
•		Mathematics 209 – Calculus and Analytic Geometry II (5)	Mathematics/Sciences		
٠		Life Sciences (4)	Life Sciences	DO THIS – Go to Career Center to explore both continued	
٠		Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	education and employment options DO THIS – Mid-term check-in with advisor	
٠		Humanities (3)	Humanities		
			15 CREDIT HOURS		

**Natural Sciences** 

#### (continued from previous page)

GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
0	Mathematics 212 – Linear Algebra (3) OR Elective (3)	Elective		
0	Mathematics 210 – Differential Equations (3) OR Elective (3)	Elective	COMPLETION of Associate in Science degree in	
٠	Humanities/Fine Arts (3)	Humanities/Fine Arts	Mathematics DO THIS – Apply online for degree and graduation	
0	Elective (3)	Elective		
٠	Chemistry 201 – General Chemistry I (5)	Physical Sciences		
		17 CREDIT HOURS		
	ΜΙΝΙΜυΜ ΤΟ	TAL: 65 CREDIT HOURS		
		PROGRAM ELECTIVES		
	Choose electives based on the	recommendation of your top transfer ins	itution. Examples:	
🗆 P	hilosophy 106 – Introduction to Philosophy (3)	Comparative Re	ligion 108 – Religion and Psychology (3)	
	hilosophy 107 – Ethics (3)	□ Mathematics 2	12 – Linear Algebra (3)	
🗆 PI				

## PROGRAMS OF STUDY Transportation, Distribution, and Logistics



## TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

#### COLLEGE TO CAREERS LOCATION: OLIVE-HARVEY COLLEGE

**In the late 19th Century,** riders of the Pony Express became famous for delivering mail from Missouri to California in ten days, an unbelievable feat at the time. Today, businesses and individuals are so reliant on fast transportation of people and goods that it is virtually impossible to imagine our lives without these services. The industry of Transportation, Distribution, and Logistics has become a mainstay, and workers are needed to manage the movements of products, drive and repair vehicles, and coordinate warehouses and distribution centers. If any of these functions interest you, you should seriously consider a career in Transportation, Distribution, and Logistics.

### DEGREE AND CERTIFICATE PATHWAYS OFFERED

		D	AC	BC
Alternative Fuel Vehicle Technolog	<b>yy</b> (pg. 180)	۰	٠	•
Automotive Body Reconstruction	٠	٠	٠	
Automotive Body Repainting Tech	nology (pg. 182)	۰	٥	٠
Automotive Chassis Maintenance	(pg. 184)	٠	٠	•
Automotive Collision Technology (	pg. 182)	۰	٠	0
Automotive Fuel Management (pg	. 184)	٠	٠	•
Automotive Maintenance (pg. 184	.)	٠	•	•
Automotive Technology (pg. 184)		٠	٠	٠
Class C Driver Training (pg. 185)		٠	٠	٠
Commercial Driver Training (pg. 1	86)	٠	٠	٠
Commercial Passenger Driver: Cla	<b>ass B</b> (pg. 187)	٠	٠	٠
Defensive Driving: Attitudinal (pg.	188)	٠	٠	٠
Diesel Technology (pg. 188)		٠	٠	٠
Forklift Operation and Safety (pg.	190)	٠	٠	٠
Limousine: Restricted Chauffeur	Fraining (pg. 190)	٠	٠	٠
Pre-Aviation Transfer-AS (pg. 191	)	٠	٠	0
Public Passenger Vehicle Training	: Taxi (pg. 192)	٠	٠	٠
Transportation, Distribution, and L	ogistics (pg. 193)	٠	٠	•
Students in Transportation, Distribution, and	h Logistics may take classes li	o the fello	wing:	
• • • •	,		wing.	
English 101	Composition May require taking English readines	s courses		
Computer Information Systems 120	Introduction to Microcompu	uters		
Automotive Technology 101	Introduction to Automotive	Technolog	IУ	
Business 155	Working in the Warehousin	g Environr	nent	
D = DEGREE // AC = ADVANCED CERTI	FICATE // <b>BC</b> = BASIC CERT	IFICATE		[[]/

Distribution, & Logistics

### Transportation, Distribution, and Logistics



### **PATHWAY:** Alternative Fuel Vehicle Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a certificate in Alternative Fuel Vehicle Technology (AFVT). If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability. The AFVT Program has been designed to prepare students to apply their skills and knowledge to correctly diagnose and repair alternative fuel vehicles such as hybrid power units in accordance with manufacturer's specifications. The AFVT program will also give emergency response, auto insurance and salvage vard personnel working knowledge to safely perform their tasks when working on or inspecting hybrid fuel vehicles. This program will also prepare automotive technicians and instructors to sit for the Automotive Service Excellence (ASE) Advanced Engine Performance examination.

#### Choose your courses with your College Advisor.

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Automotive Technology 101 – Introduction to Automotive Technology (4)	Program Prerequisite	DO THIS – Meet with advisor to discuss academic
٠	Automotive Technology 104 – Electrical Systems and Power Accessories (4)	Program Prerequisite	goals and plan coursework
		8 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 105 – Fuel Management I (4)	Program Prerequisite	DO THIC Most with advisor to confirm plane
•	Automotive Technology 204 – Electrical Systems II (4)	Program Prerequisite	DO THIS – Meet with advisor to confirm plans
		8 CREDIT HOURS	
BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Automotive Technology 205 – Fuel Management II (4)	Program Prerequisite	DO THIS – Mid-term check-in with advisor
		4 CREDIT HOURS	
BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Automotive Technology 206 – Fuel Management III (4)	Program Prerequisite	DO THIS - Mid-term check-in with advisor
		4 CREDIT HOURS	
BC	SEMESTER 5	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Automotive Technology 130 – Topics in Alternative Fuel Technology (3)	Required Program Core	
•	Automotive Technology 230 – Introduction to Alternative Fuel Technology (4)	Required Program Core	COMPLETION of Basic Certificate in Alternative Fuel
•	Automotive Technology 231 – AFT Hybrid Fuel Vehicles (4)	Required Program Core	Vehicle Technology DO THIS – Apply online for certificate
•	Automotive Technology 232 – Hybrid and Fuel Cell Vehicles (5)	Required Program Core	
		16 CREDIT HOURS	
	MINIMUM TOTAL:	40 CREDIT HOURS	

Please note that the BC requires completion of 16 credit hours, although additional hours may be required to complete the required prerequisite courses.

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (WR) (WR) (WR)

Transportation, Distribution, and Logistics



**PATHWAY:** Auto Body Reconstruction Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a certificate in Auto Body Reconstruction Technology. If this pathway is followed as outlined, you will earn a Basic Certificate (BC). It does not represent a contract, nor does it guarantee course availability.

#### Choose your courses with your College Advisor.

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 101 – Introduction to Automotive Technology (4)	Required Program Core	
•	Automotive Technology 117 – Auto Body Reconstruction I (3)	Required Program Core	DO THIS – Meet with advisor to discuss academic goals and plan coursework
•	Automotive Technology 217 – Auto Body Reconstruction II (3)	Required Program Core	goue and plan courcement
		10 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 107 – Auto Body Reconstruction (4)	Required Program Core	COMPLETION of Basic Certificate in Auto Body
•	Automotive Technology 211 – Auto Service Management (4)	Required Program Core	Reconstruction Technology
•	Automotive Technology 220 – Collision Estimating (4)	Required Program Core	DO THIS – Apply online for certificate *Check with Department Chair about possible
•	Cooperative Work Experience 101 – Cooperative Education Exploration (3)*	Required Program Core	substitutions for this class
		15 CREDIT HOURS	
	MINIMUM TOTAL:	<b>25 CREDIT HOURS</b>	

### Transportation, Distribution, and Logistics



### PATHWAY: Auto Body Repainting Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a certificate in Auto Body Repainting. This does not represent a contract, nor does it guarantee course availability. If pathway is followed as outlined, student will earn a Basic Certificate (BC) in Auto Body Repainting Technology.

#### Choose your courses with your College Advisor.

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

#### All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 101 – Introduction to Auto Technology (4)	Required Program Core	
٠	Automotive Technology 211 – Auto Service Management (4)	Required Program Core	DO THIS – Meet with advisor to confirm plans
•	Automotive Technology 220 – Collision Estimating (4)	Required Program Core	
		12 CREDIT HOURS	
BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
٠	Automotive Technology 118 – Auto Body Repainting I (3)	Required Program Core	
٠	Automotive Technology 119 – Auto Body Detailing (5)	Required Program Core	COMPLETION of Basic Certificate in Auto Body
٠	Automotive Technology 218 – Auto Body Repainting II (3)	Required Program Core	Repainting Technology DO THIS – Apply online for certificate
•	Cooperative Work Experience 101 – Cooperative Education Exploration (3) You can speak with Department Chair about possible substitutions for this class	Required Program Core	
		14 CREDIT HOURS	
	MINIMUM TOTAL:	26 CREDIT HOURS	



**PATHWAY:** Automotive Collision Technology Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in pursuing Collision Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Advanced Certificate (AC).

DEGREE CODE: AC 0133

#### Choose your courses with your College Advisor.

Communications pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.

ENGLISH PLACEMENT	READING PLACEMENT			
□ ESL/FS Writing	□ ESL/FS Reading			
ESL/English 98	□ ESL/Reading 99			
□ ESL 99	ESL Reading 100			
ESL/English 100	□ Reading 125			

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Transportation, Distribution, and Logistics

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#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS dified to fit the people of part time atudante by

AC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 101 – Introduction to Automotive Technology (4)	Required Program Care	
•	Automotive Technology 104 – Electrical Systems and Power Accessories (4)	Required Program Care	DO THIS – Meet with advisor to confirm plans
•	Automotive Technology 107 – Automotive Body Welding (4)	Required Program Care	DO THIS – Begin research on four-year schools
•	Automotive Technology 109 – Automotive Brakes (4)	Required Program Care	
		16 CREDIT HOURS	
AC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 117 – Auto Body Reconstruction I (3)	Required Program Care	
٠	Automotive Technology 118 – Auto Body Repainting I (3)	Required Program Care	DO THE Mid term shock in with an advisor
٠	Automotive Technology 119 – Automotive Body Detailing (5)	Required Program Care	DO THIS – Mid-term check-in with an advisor
٠	Automotive Technology 209 – Steering and Suspension Systems (4)	Required Program Care	
		15 CREDIT HOURS	
AC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	Automotive Technology 217 – Auto Reconstruction II (3)	Required Program Care	
•	Automotive Technology 218 – Auto Body Repainting II (3)	Required Program Care	COMPLETION of Advanced Certificate in Collision Technolog
•	Automotive Technology 220 – Collision Estimating (4)	Required Program Care	DO THIS – Apply online for advanced certificate
•	Automotive Technology 101 – Cooperative Education Exploration (3)	Required Program Care	
		13 CREDIT HOURS	
	MINIMUM TOTAL:	44 CREDIT HOURS	

### PROGRAMS OF STUDY Transportation, Distribution, and Logistics

DEGREE CODES: AAS (AT) 0125 AC (AT) 0130 BC (AT) 0116 BC (AM) 0128 BC (ACM) 0134 BC (AFM) 0136

### **PATHWAY:** Automotive Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Automotive Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn basic certificates (BC) in Automotive Chassis Maintenance (ACM), Automotive Fuel Management (AFM) and Automotive Maintenance (AM) and a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science (AAS) Degree in Automotive Technology (AT). One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Automotive Technology provides the necessary foundation and practical experience to pursue entry-level positions that meet the changing demands of the automotive industry. Entry-level positions may be found in automotive dealerships, automotive franchises, independent service repair shops, auto part stores, or through self-employment. Students will learn the technical skills essential to employment in the field of maintenance technology, auto body care, chassis, diesel, and power train, leading to employment in service, maintenance, and areas of technological specialty such as detailing, auto body paint and refinishing, as well as management occupations or self-employment. Students will also be able to consider transferring Industrial Engineering Technology credits to state universities.

#### Choose your courses with your College Advisor.

Student must be eligible for English 100, Reading 125, and Mathematics 98 to begin core curriculum classes.

	d mathematics pre-degree PASS, ACT or department c	e requirements. Placements hair recommendation.		rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Fine Arts/Humanities: (may	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104, African-American	Comptuer Information Systems 120
□ ESL 99	ESL Reading 100	□ Mathematics 98	Studies 101	
□ ESL/English 100	Reading 125	□ Mathematics 99	<ul> <li>Physical/Life Sciences:</li> <li>Biology 107 <b>OR</b> Environmental</li> <li>Technology 107</li> </ul>	

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

D AC	BCACM	BCAT	BCafm	BCam	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	•	•	•	•	Automotive Technology 101– Introduction to Automotive Technology (4)	Required Program Core	
• •	0	٠	•	0	Automotive Technology 103 – Engine Concepts (4)	Required Program Core	COMPLETION of Basic Certificate in Automotive Technology
• •	٠	٠	•	٠	Automotive Technology 104 – Electrical Systems and Power Accessories (4)	Required Program Core	DO THIS - Meet with advisor to
• •	٠	٠	0	٠	Automotive Technology 109 – Automotive Brakes (4)	Required Program Core	discuss academic goals and plan coursework
• •	•	•	0	٠	Automotive Technology 209 – Steering and Suspension Systems (4)	Required Program Core	
						20 CREDIT HOURS	
D AC	BCACM	BCAT	BCAFM	BCam	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• •	٥	٠	•	٠	Automotive Technology 105 – Fuel Management I (4) (AC/AAS Track 1) <b>OR</b> Automotive Technology 106 Fuel Systems (5) (AC/AAS Track 1)	Required Program Core	COMPLETION of Basic Certificate in Automotive Chassis Maintenance
• •	0	0	0	0	Automotive Technology 204 – Electrical Systems II (4)	Required Program Core	ALMOST halfway complete with the Associate in Applied Science degree in
• •	0	0	0	0	English 101 – Composition I (3)	Communications	Automotive Technology
• •	•	•	0	•	Cooperative Work Experience 101 – Cooperative Education Exploration 101 (3)	Required Program Core*	*Cooperative Work Experience 101 is Required Program Core for the BC(AM) and BC(ACM), but is a program elective for the AAS

(continued on next page)

14-15 CREDIT HOURS

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5   A	AC	BC <sup>acm</sup>	BCAT	BCAFM	ВСАМ	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTION	
	•	0	0	•	0	Automotive Technology 205 – Fuel Management II (4) (AC/AAS Track 1) <b>OR</b> Automotive Technology 210 – Performance and Driveability (5) (AC/AAS Track 2)	Required Program Core	COMPLETION of Basic Certificate in Automotive Technology	
	•	0	0	0	•	Automotive Technology 211 – Auto Service Management (4) (AC/AAS Track 1) <b>OR</b> Automotive Technology 212 – Manual Drive Train and Axles (4) (AC/AAS Track 1)	Required Program Core	COMPLETION of Basic Certificate i Automotive Maintenance ALMOST half-way complete with the Associate in Applied Science degree	
	•	•	0	0	•	Automotive Technology 215 – Automotive Temperature Control Systems (4)	Required Program Core	DO THIS – Visit the Career Center and	
	0	•	0	0	0	Mathematics/Science course (4)	Mathematics/Science	Transfer Center to discuss options	
							16-17 CREDIT HOURS		
	AC	BC <sup>acm</sup>	BCAT	BCAFM	ВСам	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTION	
	•	٥	۰	•	٥	Automotive Technology 206 – Fuel Management III (4) (AC/AAS Track 1) <b>OR</b> Automotive Technology 207 – Transmission Transaxle and Drive (4) (AC/AAS Track 2)	Required Program Core	COMPLETION of Basic Certificate in Automotive Fuel Management	
	•	0	۰	•	0	Automotive Technology 108 – Work-based Learning I (6) (AC/AAS Track 1) <b>OR</b> Cooperative Work Experience 101 – Cooperative Education Exploration 101 (3) (AC/AAS Track 2)	Required Program Core	COMPLETION of Advanced Certificate in Automotive Technology DO THIS – Apply online for certificate COMPLETION of Associate in	
	0	•	0	•	0	Social/Behavioral Sciences course (3)	Social/Behavioral Sciences (HD)	Applied Science degree in Automotive Technology	
	0	•	0	۰	0	Humanities/Fine Arts course (3)	Humanities/Fine Arts	DO THIS – Apply online for degree and graduation	
	0	•	0	۰	0	Humanities or Social/Behavioral Sciences course (3)	General Education		
							16-17 CREDIT HOURS		
						MINIMUM TOTAL:	66 CREDIT HOURS		
						PROGRAM ELECTIVES			
		omotive Manaç		ology 10 I (4)	)5 — [	Automotive Technology 108-1 Automotive Technology 204 – – Work-Based Learning I (3-6) Electrical Systems II (4)	Automotive Technology 20 Transmissions, Transaxle a Driveline (4)		

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (HX) (DH) (HV) (WR)



BC 0405

### PATHWAY: Class C Driver Training

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate (BC) in Class C Driver Training. If this pathway is followed as outlined, you will earn a Basic Certificate. It does not represent a contract, nor does it guarantee course availability. The Class C Driver Training program is designed to provide students with an in-depth coverage of the laws, rules and regulations that are applicable to the operation of both commercial and non-commercial motor vehicles. Students will gain knowledge and skills in the areas of vehicle inspection, pre-testing, skill operations and defensive driving techniques. Students will be eligible to apply for positions such as delivery driver, para-transit driver and/or medi-car driver.

Choose your courses with your College Advisor.

# SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters. BC SEMESTER 1 CATEGORY ACHIEVEMENTS & NEXT ACTIONS • Class C Driver Training (3) Required Program Core COMPLETION of Basic Certificate in Class C Driver Training Do THIS – Meet with advisor to discuss academic goals and plan coursework • MINIMUM TOTAL: 3 CREDIT HOURS • D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE Programs offered at: (a) <td

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE FOR MORE INFO ON DEGREE AND CERTIFICATE PROGRAMS, VISIT CCC.EDU

### Transportation, Distribution, and Logistics



### **PATHWAY:** Commercial Driver Training

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an example course sequence for students interested in earning a Basic Certificate (BC) in Commercial Driver Training. This does not represent a contract, nor does it guarantee course availability.

#### Prospective students must apply for admission into the Commercial Driver Training Program.

#### ADMISSIONS REQUIREMENTS

The Commercial Driver Training certificate program is designed for individuals with little or no commercial driving experience. The Commercial Driver Training program trains students for entry level employment as commercial motor vehicle operators. In partnership with the Illinois Department of Transportation, this program prepares students to obtain a Commercial Driver's License in the State of Illinois. The basic requirements to enter the program are:

□ Must be at least 21 years of age

Have a valid Illinois driver's license

□ Have a good driving record

- Provide a current Court-Purpose Motor Vehicle Report (MVR) which can be obtained from Secretary of State for \$12.00
- Be able to pass a DOT Physical and Drug Screen

□ Must be able to read, write and understand English

#### Choose your courses with your College Advisor.

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS		
•	CE 013 337 – Commercial Driving Training Theory (6)	R	equired Program Core			
٠	0504-106 – Road Driving (2)	R	equired Program Core	COMPLETION of Basic Certificate in Commercial Driver Training		
٠	0504-148 – Commercial Driver (4)	R	equired Program Core	2		
	мілім	UM TOTAL: 1	2 CREDIT HOURS			
D =	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 01 (11) (11) (11) (11) (11) (11) (11) (					

Transportation, Distribution, and Logistics



### PATHWAY: Commercial Passenger Driver: Class B

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate (BC) in Commercial Passenger Driver: Class B. This does not represent a contract, nor does it guarantee course availability.

#### Prospective students must apply for admission into the Commercial Driver Training Program.

ADMISSIONS REQUIREMENTS

The Commercial Passenger Driver: Class B certificate program is designed for students with minimum experience who are trained to operate Class B passenger and non-passenger motor vehicles. In partnership with the Illinois Department of Transportation, the program prepares students for a Class B Commercial Driver's License in the State of Illinois.

□ Must be at least 21 years of age

□ Have a valid Illinois driver's license

□ Have a good driving record

- Provide a current Court-Purpose Motor Vehicle Report (MVR) which can be obtained from Secretary of State for \$12.00
- Be able to pass a DOT Physical and Drug Screen

□ Must be able to read, write and understand English

#### Choose your courses with your College Advisor.

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS			
•	CE 013-338 – Passenger Driver Theory (5)	Required Program Core	COMPLETION of Basic Certificate in Commercial			
٠	0504-147 – Passenger Driver Practice (4)	Required Program Core	Passenger Driver: Class B			
	ΜΙΝΙΜΟΜ ΤΟΤΑΙ	L: 9 CREDIT HOURS				
D =	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (KK) (DA) (DA) (TR) (HW) (WR)					

### Transportation, Distribution, and Logistics



BC 0890

### PATHWAY: Defensive Driving: Attitudinal

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate (BC) in Defensive Driving: Attitudinal. It does not represent a contract, nor does it guarantee course availability. The Defensive Driving Attitudinal certificate program comprises an eight-hour workshop which addresses the needs of those individuals who are repeat violators of traffic rules and regulations and newly licensed chauffeurs who have been driving in the United States for at least three years. This training component is certified by the National Safety Council. Topics include the violation of rules and regulations, cultural sensitivity, anger management and conflict resolution, as well as behavior modification approaches for effective customer service. Additionally, the training also reviews the Illinois Rules of the Road Handbook and prepares the inexperienced chauffeur driver for the road. Students will receive the National Safety Council certificates of completion once they successfully complete the workshop program.

#### Choose your courses with your College Advisor.

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

	•		, , , , , , , , , , , , , , , , , , , ,
BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
• 0504-114 Defensive Driving – Attitudinal (1)		Required Program Core	COMPLETION of Basic Certificate in Defensive Driving: Attitudinal DO THIS – Meet with advisor to discuss academic goals and plan coursework
	MINIMUM TOTAL:	1 CREDIT HOUR	
D = 1	DEGREE // AC = ADVANCED CERTIFICATE // B	Programs offered at: 💿 📧 😡 🕞 🕫 🕬 🖙	



DEGREE CODES: AAS 0400 AC 0401 BC 0402

### PATHWAY: Diesel Technology

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Diesel Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Diesel Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The Diesel Technology AAS Degree equips you with the skills necessary to repair and maintain diesel-powered highway, industrial, and marine vehicles and equipment. You will gain more detailed instructions in how diesel maintenance techniques and principles are applied in diagnosing malfunctions and prescribing corrective action. The course work highlights diesel service management, critical thinking and problem solving, theory and skills of refrigeration, electronic and mechanical fuel injection, chassis maintenance, vehicle inspection, tune-up, engine overhaul, transmission repair, brake service, handling hazardous waste and preventative maintenance. You will also be eligible to take the National Institute of Automotive Service Excellence (NAISE) examinations in heavy truck mechanics, Allison Transmission certification, and Hybrid certification.

The Diesel Technology Advanced Certificate Program provides students with the training needed for maintaining and repairing heavyduty diesel powered equipment. Instructional training is heavily focused on diesel engines performance, hydraulics, electrical, air conditioning, and drive trains.

The Diesel Technology Basic Certificate Program introduces students to the basic fundamentals of diesel technology and provides them with the necessary entry-level skills and theory to enter either the medium/heavy duty or construction equipment service/repair fields. This certificate prepares students to become repair technicians. Graduates will be qualified for positions requiring diagnosis and repair of diesel engines, suspension and steering, brakes, and electrical and electronic systems.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.				rses that can be taken degree courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES	
ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	Humanities: African-American	□ College Success	
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	Studies 101	□ Mathematics 107	
□ ESL 99	ESL Reading 100	□ Mathematics 98			
ESL/English 100	□ Reading 125	□ Mathematics 99			
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#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters. CATEGORY BC SEMESTER 1 ACHIEVEMENTS & NEXT ACTIONS AC English 101 - Composition I (3) Required Program Core ۲ Mathematics 107 - Mathematics for Technicians I (5) Required Program Core DO THIS - Meet with advisor to discuss Physical Sciences 102 - General Course (3) . Mathematics/Science academic goals and plan coursework Transportation 111 – Introduction to Diesel Technology (3) Required Program Core • Transportation 113 – Introduction to Diesel Engine Construction (3) Required Program Core 17 CREDIT HOURS **SEMESTER 2** CATEGORY ACHIEVEMENTS & NEXT ACTIONS AC Transportation 112 - Diesel Electrical Systems I (3) • Required Program Core Transportation 114 - Diesel Engine Construction I (3) Required Program Core **COMPLETION** of Basic Certificate in **Diesel Technology** • Transportation 115 – Suspension and Steering (3) Required Program Core DO THIS - Meet with advisor to discuss Advanced Certificate, Associate in Applied Physical Sciences 112 - General Course II (4) • . Mathematics/Science Science degree, and four-year transfer African-American Studies 101 - Introduction to African-American Studies (3) OR options Humanities 143 - Introduction to Latin American/Latino Studies (3) OR Humanities (HD) Humanities 215 - The Art and Philosophy of the African Continent (3) 16 CREDIT HOURS **SEMESTER 3** CATEGORY **ACHIEVEMENTS & NEXT ACTIONS** D Transportation 116 - Diesel Brakes (3) Required Program Core 0 Transportation 209 - Diesel Electrical Systems II (3) Required Program Core . . Transportation 211 – Diesel Preventative Maintenance (3) Required Program Core Geography 101 - World Geography (3) OR Social/Behavioral Sciences Economics 201 – Principles of Economics (3) **12 CREDIT HOURS** SEMESTER 4 CATEGORY AC BC ACHIEVEMENTS & NEXT ACTIONS Transportation 213 - Diesel Engine Construction II (3) Required Program Core Transportation 214 - Emission Controls (3) Required Program Core . **COMPLETION** of Advanced Certificate in **Diesel Technology** . Transportation 215 - Diesel Engine Performance (3) Required Program Core DO THIS - Apply online for advanced Transportation 216 - Heavy Duty Drives I (Manual) (3) Required Program Core certificate Transportartion 218 - Heating and Air Conditioning (3) Required Program Core **15 CREDIT HOURS** AC BC **SEMESTER 5** CATEGORY ACHIEVEMENTS & NEXT ACTIONS Transportation 217 - Heavy Duty Drives II (Automatic) (3) Required Program Core . **COMPLETION** of Associate in Applied Transportation 219 - Hydraulic Systems (4) Required Program Core . Science degree in Diesel Technology DO THIS - Apply online for degree and Transportation 220 - Advanced Diagnostics (4) Required Program Core araduation Recommended Elective: Business 168 - 21st Century Ground Transportation (8) Program Elective 11-19 CREDIT HOURS MINIMUM TOTAL: **71 CREDIT HOURS PROGRAM ELECTIVES** AAS Optional:

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at:

**Cus Area:** Transportation Distribution, & Logistics

 $\label{eq:def-basic} D = \mathsf{DEGREE} \ // \ \mathbf{AC} = \mathsf{ADVANCED} \ \mathsf{CERTIFICATE} \ // \ \mathbf{BC} = \mathsf{BASIC} \ \mathsf{CERTIFICATE} \\ \mathsf{FOR} \ \mathsf{MORE} \ \mathsf{INFO} \ \mathsf{ON} \ \mathsf{DEGREE} \ \mathsf{AND} \ \mathsf{CERTIFICATE} \ \mathsf{PROGRAMS}, \ \mathsf{VISIT} \ \mathsf{CCC.EDU} \\ \mathsf{CCC.EDU} \ \mathsf{CCC.EDU} \ \mathsf{CCC} \ \mathsf{CEC} \$ 

### Transportation, Distribution, and Logistics



BC 0848

### **PATHWAY:** Forklift Operation and Safety

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate in Forklift Operation and Safety. This does not represent a contract, nor does it guarantee course availability.

The Forklift Operation and Safety Certificate Program prepares students to become safe and effective forklift operators. Upon completion of the program, students will have working knowledge of the basic use of lift trucks, as well as the ability to safely inspect and operate lift trucks. The curriculum includes theory and practical training.

#### Choose your courses with your College Advisor.

SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.					
BC	SEMESTER 1		CATEGORY	ACHIEVEMENTS & NEXT ACTIONS	
• 0504 -	- 118 Forklift Operator (2)	Requ	uired Program Core	COMPLETION of Basic Certificate in Forklift Operation and Safety	
	MIN	IMUM TOTAL: 2 C	CREDIT HOURS		
D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE					



DEGREE CODE: BC 0889

### PATHWAY: Limousine: Restricted Chauffeur Training

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a Basic Certificate (BC) in Limousine Residential Chauffeur Training. This does not represent a contract, nor does it guarantee course availability.

The Limousine Restricted Chauffeur Training Certificate Program is an intensive one-day training that prepares individuals to become restricted public chauffeurs. Students participating in this training are eligible to become licensed to drive a livery/limousine. The training is offered four times each month and is intended to serve as a preparatory course to assist individuals with the successful completion of the restricted public chauffeur's license exam. Students learn current chauffeur rules and regulations, as well as information on new cultural attractions, buildings, hospitals and hotels.

Choose your courses with your College Advisor.

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	0504 – 113 Limousine/Residential Chauffeur Training (1)	Required Program Core	COMPLETION of Basic Certificate in Limousine: Restricted Chauffeur Training
	MINIMUM TOTAL:	1 CREDIT HOUR	
D =	DEGREE // AC = ADVANCED CERTIFICATE // BC =	BASIC CERTIFICATE	Programs offered at: DA KK (MX (DH) (B) (MV (MB)

DEGREE CODE: AS 0211

### **PATHWAY:** Pre-Aviation Transfer-AS

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

The sky's the limit with our pre-aviation pathway. Whether you're following your dream of flying a plane or helicopter, working in aviation technology or air traffic control, the pre-aviation pathway gets you off the runway. With your associate degree, you can transfer to a four-year college, earn your bachelor's degree and start a career in the airline industry, military, helicopter news reporting, or aerospace technology.

This is an **example course sequence** for students interested in pursuing Aviation. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to Bachelor's-level programs of study. In particular, courses that fulfill the General Education Core Curriculum (GECC) help you transfer to a four-year university. These courses are indicated with a dot in the column to the left of the courses themselves.

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			U U U U U U U U U U U U U U U U U U U	rses that can be taken degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	GENERAL EDUCATION COURSES	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	FS Mathematics I	Humanities/Fine Arts: (May	College Success
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	choose 2) Art 103, Music 121, Fine Arts 104; African-American Studies 101	
□ ESL 99	ESL Reading 100	Mathematics 98		
ESL/English 100	Reading 125	□ Mathematics 99		

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	GECC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	African-American Studies 101 – Introduction to African-American Studies (3)	Humanities (HD)	
٠	•	English 101 – Composition I (3)	Communications	COMPLETION of general education classes DO THIS – Meet with an advisor to discuss academic
•	٠	Mathematics 207- Calculus and Analytic Geometry I (5) COMPASS-based placement or prerequisite: Mathematics 140 – College Algebra (4)/ Mathematics 141 – Plane Trigonometry (3) <b>OR</b> Mathematics 143 – Pre-Calculus (6)	Mathematics	goals and plan coursework DO THIS – Establish contact with transfer institution for Aviation degree
•	•	Physical Sciences 118 – Introduction to Meteorology (4)	Physical Sciences	
			15 CREDIT HOURS	
D	GECC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Economics 201 – Principles of Economics I (3)	Social/Behavioral Sciences	
•	•	English 102 – Composition II (3)	Communications	
•	0	Physics 235 – Engineering Physics I (5)	Mathematics/Sciences	ALMOST halfway through Associate in Science degree DO THIS – Meet with advisor to confirm plans
•	•	Fine Arts course (3)	Fine Arts	
•	•	Speech 101 – Fundamentals of Speech (3)	Communications	
			17 CREDIT HOURS	
D	GECC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	Economics 202 – Principles of Economics II (3)	Social/Behavioral Sciences	
•	0	Mathematics 208 – Calculus and Analytic Geometry II (5)	Mathematics/Sciences	DO THIS – Go to Career Center to explore both
•	٠	Philosophy 107 – Ethics (3)	Humanities	continued education and employment options DO THIS – Mid-term check-in with advisor
•	0	Physics 236 – Engineering Physics II (5)	Mathematics/Sciences	
			16 CREDIT HOURS	

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D	GECC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	Biology 114 – General Education Biology (4)	Life Sciences	
•	0	Mathematics 209 – Calculus and Analytic Geometry III (5)	Elective	COMPLETION of Associate in Science degree in Pre-Aviation
•	٠	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	DO THIS – Apply online for degree and graduation
•	0	Physics 237 – Engineering Physics III (5)	Elective	
			17 CREDIT HOURS	
		MINIMUM TOT	AL: 65 CREDIT HOURS	

PROGRAM ELECTIVES

Choose electives based on the recommendations of your top transfer institutions.

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: 😡 ඟ 😡 🖓 👘



DEGREE CODE: BC 0715

### PATHWAY: Public Passenger Vehicle Training: Taxi

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a certificate in Public Passenger Vehicle Training: Taxi. This does not represent a contract, nor does it guarantee course availability. If the pathway is followed as outlined, a student will earn a Basic Certificate.

The Basic Certificate program for Public Passenger Vehicle Training: Taxi is designed to prepare individuals to become public chauffeurs in the City of Chicago and to take the Public Chauffeur License examination issued by the Chicago Department of Business Affairs and Consumer Protection. This two week comprehensive training program covers Chicago geography/navigation, departmental rules and regulations, accessibility training, and professional development.

Choose your courses with your College Advisor.

#### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS All plans can be modified to fit the needs of part-time students by adding more semesters.

BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS				
•	• 330BSCM 100 – Public Passenger Vehicle Training/Taxi (6) Required Program Core		COMPLETION of Basic Certificate in Public Passenger, Vehicle Training: Taxi BECOME a taxi driver DO THIS – Visit the Career Center to discuss options				
	MINIMUM TOTAL:	6 CREDIT HOURS					
D =	= DEGREE // AC = ADVANCED CERTIFICATE // BC	= BASIC CERTIFICATE	Programs offered at: DA KK DA OH TB DW W				



DEGREE CODES: AAS 0737 AC 0738 BC 0739

### **PATHWAY:** Transportation, Distribution, and Logistics

Visit your College Advisor, <u>ccc.edu</u>, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in Transportation, Distribution and Logistics. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science Degree (AAS) in Transportation, Distribution and Logistics. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS Degree in Transportation, Distribution and Logistics provides students with a direct experience working in a logistics environment, building skills critical to success including: operations/business development, receiving, shipping, and case analysis. The program prepares students for working from entry level to supervisory positions. Students will receive three semesters of practical logistics operations experience, working at the college's onsite distribution center, the "Central Store".

#### Choose your courses with your College Advisor.

Communications and mathematics pre-degree requirements. Placements based on COMPASS, ACT or department chair recommendation.			College-level courses that can be taken while in pre-degree courses.
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	ELECTIVE COURSES
□ ESL/FS Writing	□ ESL/FS Reading	□ FS Mathematics I	Computer Information Systems 120
ESL/English 98	ESL/Reading 99	□ FS Mathematics II	
□ ESL 99	ESL Reading 100	Mathematics 98	
ESL/English 100	□ Reading 125	□ Mathematics 99	

## SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC	BC	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Business 155 – Working in the Warehousing Environment (3)	Required Program Core	
•	•	•	Logistics/Transportation/Distribution 158 - Purchasing (3)	Required Program Core	COMPLETION of Basic Certificate in
٠	•	•	Logistics/Transportation/Distribution 152 – Introduction to Business Logistics (3)	Required Program Core	Transportation, Distribution, and Logistics DO THIS – Meet with an advisor to discuss
•	•	•	Mathematics 118 – General Education Mathematics (4)	Mathematics/Science	academic goals and plan coursework
٠	•	•	Interdisciplinary Studies 102 – Career Development and Decision Making (3)	Required Program Core	
				16 CREDIT HOURS	
D	AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	٠	English 101 – Composition I (3)	Communications	COMPLETION of Advanced Certificate in
•	•	۰	Computer Information Systems 120 – Introduction to Microcomputers (3)	Required Program Core	Transportation, Distribution, and Logistics DO THIS – Meet with an advisor to discuss
•	•	0	Logistics/Transportation/Distribution 150 – Introduction to Transportation Administration (3)	Required Program Core	advanced certificate, Associate in Applied Science degree, and four-year transfer options
•	•	۰	Logistics/Transportation/Distribution 151 – Applied Logistics (Central Store) (6)	Required Program Core	DO THIS – Apply online for advanced certificate
				15 CREDIT HOURS	
D	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	Psychology 201 – General Psychology (3)	Social/Behavioral Sciences	
٠	•	•	Business 237 – Selling (3)	Required Program Core	
٠	•	•	Logistics/Transportation/Distribution 151 – Applied Logistics (Central Store) (6)	Required Program Core	
٠	•	0	Business 284 – Business Communications (3)	Required Program Core	
				15 CREDIT HOURS	

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Transportation, Distribution, and Logistics

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D	AC	BC	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	٠	0	Economics 201 – Principles of Economics(3)	Social/Behavioral Sciences	COMPLETION of Associate in Applied
•	٠	0	Speech 101 – Fundamentals of Speech (3)	Communications	Science degree in Transportation, Distribution,
•	٠	0	Sociology 241 – Institutional Racism (3)	Elective (HD)	and Logistics DO THIS – Apply online for degree and
•	۰	0	Logistics/Transportation/Distribution 151 – Applied Logistics (Central Store) (6)	Required Program Core	graduation
				15 CREDIT HOURS	
			MINIMUM TOTAL:	61 CREDIT HOURS	
D =	D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE // Programs offered at: (DA) (RA) (DA) (TR) (TR) (TR) (TR) (TR) (TR) (TR) (TR				

#### **ASSOCIATE DEGREES**

#### Associate in Arts Degree (AA) 210

The Associate in Arts (AA) degree prepares an individual for transfer to a four-year college or university. The general education and focus area course components are covered under the Illinois Articulation Initiative (IAI). Consistent with the IAI model and the ICCB Administrative Rules, the City Colleges of Chicago requires that the degree is inclusive of a minimum of 37 semester hours of General Education, spanning the following disciplines:

**Communications** (3 courses/9 CH, including 3 CH in oral communications)

Mathematics (one course/minimum of 3 CH)

Mathematics 118 or 121 or 122 or 125 or 127 or 141 or 144 or 146 or 204 or 207 or 208 or 209 or 225

Humanities and Fine Arts (3 courses/minimum of 9 CH)

Social and Behavioral Sciences (3 courses/minimum of 9 CH)

Physical and Life Sciences (2 courses/minimum of 7-8 CH)

#### **Additional AA Requirements**

Core and elective courses comprise a minimum of 25 credit hours

• Students should work with a College Advisor to select appropriate core and elective courses, or simply select an AA semester map as a guide.

#### Minimum Total Credit Hours Required for AA 62 CH

#### Associate in Science (AS) 211

The Associate in Science (AS) degree prepares an individual for transfer to a four-year college or university. The general education and focus area course components are covered under the Illinois Articulation Initiative (IAI). Consistent with the IAI model and the ICCB Administrative Rules, the City Colleges of Chicago requires that the degree is inclusive of a minimum of 37 semester hours of General Education, spanning the following disciplines:

**Communications** (three courses/9 CH, including 3 CH in Oral Communications)

Mathematics (one course/minimum of 3 CH)

Humanities and Fine Arts (three courses/minimum of 9 CH)

Social and Behavioral Sciences (three courses/minimum of 9 CH)

Physical and Life Sciences (two courses/minimum of 7-8 CH)

#### **Additional AS Requirements**

Core and elective courses comprise a minimum of 25 credit hours

 Students should work with a College Advisor to select appropriate core and elective courses, or simply select an AS semester map as a guide. Of the 25 credit hours there must be a minimum of 14 credit hours in mathematics and/or life/physical science, and/or computer science, and/or health science.

Minimum Total Credit Hours Required for AS 64 CH

#### Associate in Engineering Science (AES) 100

The Associate in Engineering Science (AES) degree offers courses required for transfer to a four-year college or university for students majoring in engineering sciences. Completion of the AES degree does not fulfill the requirements of the IAI General Education Core Curriculum (IAI GECC). City Colleges of Chicago requires that the degree is inclusive of a minimum of 22 semester hours of General Education. A student must complete the general education requirements of the college or university to which she/ he transfers.

General Education	22 CH
Communications English 101 and 102	6 CH
Humanities	3 CH
Social Sciences (Economics 202 is recommended)	3 CH
<ul> <li>One of the courses in the Humanities or Social Scien to satisfy the Human Diversity requirement.</li> </ul>	ces has
Math Mathematics 207	5 CH
Science Chemistry 201	5 CH
Required Program Core	42 CH
Math (208, 209 and 210)	13 CH
Physics (235, 236 and 237)	15 CH
Engineering (190)	3 CH
At least 11 CH among: Physics 215, 216, 217, Engineering 131, 215, 250, Chemistry 203, Electronics 206.	111,

**Electives:** Chemistry 205, 207, CIS 142, 144, 242, 244, Engineering 115, 132, 165, 202, Manufacturing 138

#### Minimum Total Credit Hours Required for AES 64 CH

#### Associate in General Studies (AGS) 203

The Associate in General Studies (AGS) degree provides students the ability to explore a broad range of college-level courses to develop new skills or investigate a personal interest. Courses may transfer individually to a four-year university, but the degree as a whole is not designed for transfer or as an occupational degree. Students should work closely with an advisor to determine if the AGS is the right degree program to reach their individual goals. City Colleges of Chicago requires that the degree is inclusive of a minimum of 20 semester hours of General Education.

#### General Education Requirements

20 CH

Communications English 101 Required

**Fine Arts and Humanities** 

Select any two courses from the following disciplines:

Afro-American Studies, Art, Fine Arts, World Language, Humanities, Literature, Music, Philosophy, Religion, Theater Art

**Mathematics and Science** 

Select any two courses from the following disciplines:

Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Oceanography, Physical Science, Physics, Zoology

### PROGRAMS OF STUDY Degree Overviews

Social And Behavioral Sciences

Select any two courses from the following disciplines:

Anthropology, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology

#### Required Program Electives

#### Minimum Total Credit Hours Required for AGS 60 CH

#### Associate in Fine Arts (AFA)

The Associate in Fine Arts (AFA) degree offers courses required for transfer to a four-year college or university for students majoring in art (studio), art education, music education, or music performance. Completion of the AFA degree does not fulfill the requirements of the Illinois Transferable General Education Core Curriculum (IAI GECC). A student must complete the general education requirements of the college or university to which she/he transfers. The City Colleges of Chicago requires that the degree is inclusive of a minimum of 28-35 semester hours of General Education, spanning the following disciplines:

Art (Studio) 216; Art Education 217 and Music Performance 205; Music Education 208

#### I. Required Program AFA Degree

	lange nom 00-00 cm
eneral Education* (minimum)	28-35 CH
Communications English (035)	
101 Composition I	3 CH
102 Composition II	3 CH
Speech (095)	
101 Fundamentals of Speech Communication	3 CH
Fine Arts and Humanities by MAJOR*	
Art (Studio) (216) – select two courses	6 CH
Art Education (217) – select three courses	9 CH
Music Education (208) – select two courses	6 CH
Music Performance (205) - select two course	es 6 CH
Select any two or three courses from the follow	wing disciplines:
Afro-American Studies, Art, Fine Arts, World Humanities, Literature, Music, Philosophy, Re	
Mathematics	
118 General Education Mathematics <b>OR</b> 125 Introductory Statistics	4 CH
Physical and Life Sciences*	7-8 CH
Select any two courses from the following disc course must be a lab course:	ciplines; at least one
Astronomy, Biology, Botany, Chemistry, Geolo	gy, Mathematics,

Oceanography, Physical Science, Physics, Zoology

Social and Behavioral Sciences by MAJOR*	
Art (Studio) (216) – select two courses	6 CH
Art Education (217) – select two courses	6 CH
Music Education (208) – select three courses	9 CH
Music Performance (205) – select one course	3 CH

#### Additional AFA Requirements

40 CH

Range from 60-68 CH

Core and elective courses comprise a minimum of 28-33 credit hours

• Students should work with a College Advisor to select appropriate core and elective courses, or simply select an AFA semester map as a guide.

*Select any one to three courses from the following disciplines:* Anthropology, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology

#### **II. Required Credit Hours for Core by MAJOR**

30 CH
12 CH
26 CH
35 CH

Consult with a College Advisor for selection of required core courses by Major.

III. Required Elective Credit Hours by MAJOR	
Art Education (217)	13 CH
Music Education (208)	2 CH
Music Performance (205)	4 CH

#### Associate in Applied Science (AAS)

The Associate in Applied Science (AAS) degrees are occupational programs that are structured for students primarily interested in acquiring Career Technical Education (CTE) skills in order to enter the job market. However, a number of four-year institutions offer baccalaureate degrees designed to accommodate AAS degree graduates. Students planning to transfer to a four-year institution should meet with an advisor from the institution to which he/she plans to attend to discuss transferability of the AAS degree and individual courses.

Students seeking an AAS degree must select a program of study, (e.g., Child Development, Criminal Justice, Nursing) in order to determine the specific general education courses, the program core courses, and electives that are required to complete the program. An AAS degree is comprised of 50 to 75% of required technical core and specialty course work. Additionally, the AAS degree requires a minimum of 15 credit hours of general education.

Minimum General Education Hours	15 CH
Minimum Core and Electives	45 CH
Minimum Required for Completion	60 CH

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### PROGRAMS OF STUDY Additional Programs of Study

#### **ADVANCED MANUFACTURING**

### Basic Manufacturing 825

**Basic Certificate (BC)** 

14.5 CH

In the Basic Manufacturing certificate program, students learn to use machine tools to produce precision metal parts. In order to gain employment, students use their knowledge of the working properties of metals and their skill with machine tools to plan and carry out the operations needed to make machined products that meet precise specifications.

Required Program Core	14.5 CH
120 Workplace Safety/Industry Safety and Health	1 CH
121 Print Reading and Measurement	2 CH
122 Basic Machining Processes	4 CH
123 Basic CNC Machining	4 CH
124 Product Design Using Mastercam	3 CH
125 Nims Credentialing	.5 CH
Total Program Minimum Credit Hours	14.5 CH

## Computer Numeric Control (CNC) Technician 826Basic Certificate (BC)15 CH

The instructor certified CNC certificate program is for students interested in manufacturing in the area of Computer Numeric Control. By enrolling in 200 hours of training to become a machinist CNC set-up or operator, students will learn the safety and maintenance procedures of manufacturing; operate machinery such as drill press, lathes and mills; learn CNC machining such as writing G/M code, and run simulations of writing and running programs on the CNC machinery.

#### **Total Program Minimum Credit Hours**

15 CH

#### Industrial Maintenance 790

#### Advanced Certificate (AC)

36 CH

The Advanced Certificate program in Industrial Maintenance applies the theory and application of electricity and electronics to wiring, motors, industrial controls, electronic instrumentation, and programmable logic controllers. The program integrates academic and occupational education and leads to an internship at an actual worksite. These skills will help students expand their career opportunities and career plans in occupations related to power and control of buildings and equipment. Projects will demonstrate wiring, motor controls, switches, power operated mechanical devices, and other set-ups of systems that apply to electric/electronic power controls.

Required Program Core	36 Ch
432ENGR	
502 Electrical Wiring	3 CH
503 Applied Mathematics	3 CH
504 Introduction to Pneumatic Technology	2 CH
505 Solid State Fundamentals	3 CH
506 Industrial Motors	3 CH
507 Industrial Controls	3 CH
508 Digital Electronics Fundamentals	3 CH
509 Industrial Programmable Control	3 CH
510 Industrial Hydraulics	3 CH
512 Internship	2 CH
515 Principles of DC/AC	4 CH
516 Quality Assurance	2 CH
517 National Electric Code	2 CH
Total Program Minimum Credit Hours	36 CH

Additional Programs of Study

## CONSTRUCTION TECHNOLOGY AND DRAFTING

#### **Architectural Drafting 122**

#### Associate in Applied Science (AAS)

The AAS degree program in Architectural Drafting is the study of techniques necessary to produce working drawings by which a building is constructed or remodeled. Completion of this program leads to employment as a draftsman or detailer in architecture or design firms or contractors, material suppliers or construction-related companies. Study may include Computer-Aided Design or Drafting.

#### **General Education**

#### 15 CH

63 CH

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

Required Program Core	21 CH
Architecture (005)	
121 Architectural Drawing I	4 CH
122 Architectural Drawing II	4 CH
123 Architectural Drawing III	4 CH
166 Concepts of Planning	5 CH
202 General Construction	4 CH
Additional Requirements	25 CH
Architecture (005)	
170 Computer-Aided Design I for Architectural Drafting Techniques	3 CH
171 Computer-Aided Design II for Architectural Drafting Techniques	3 CH
172 Computer-Aided Design III for Architectural Drafting Techniques	3 CH
204 General Construction Advanced	4 CH
266 Architectural Planning	5 CH
Art (010)	
Any drawing course	2-3 CH
Mathematics (045)	
143 Pre-Calculus or other Mathematics course(s) recommended by a College Advisor	5-6 CH
Electives	2-3 CH
Total Program Minimum Credit Hours	63 CH

#### **Architectural Drafting 124**

Basic Certificate (BC)	16 CH
Required Program Core	16 CH
Architecture (005)	
121 Architectural Drawing I	4 CH
122 Architectural Drawing II	4 CH
202 General Construction	4 CH
204 General Construction Advanced	4 CH
Total Program Minimum Credit Hours	16 CH

## Communications Technology 750Associate in Applied Science (AAS)65 CH

The AAS degree program in Communications Technology is a cooperative effort between Richard J. Daley College and the Electrical Joint Apprenticeship and Training Trust (EJATT) which is made up of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local Union 134. Through the joint effort of the college and EJATT, the program is dedicated to consistently provide state-of-the art education and training to apprentices, and through them to the residential and commercial building contractors in the Chicagoland area. This commitment to both the individual and industry requires not only providing electricians for today's market, but also for tomorrow's market and future technologies.

Daley College and the EJATT are working cooperatively in order to structure the program to benefit the students in meeting their educational and career objectives while maintaining the integrity and quality of the program. Selection for admission into the program is a rigorous process which functions to ensure that the most qualified candidates are selected by both the City Colleges of Chicago and the selection process established by the EJATT Local Union 134, which follows the guidelines of federal and state laws regulating admission into a registered apprenticeship program.

- Graduation from an accredited high school or acceptable scores on the General Education Development (GED) test. Foreign and domestic high school education or domestic GED must be validated by official transcripts. Official transcripts will be accepted in place of the high school diploma if the graduation date is provided.
- At least 18-years-old, prior to application.
- Have taken two semesters of algebra (at high school or college) with a minimum of "C" grade in each semester, completed prior to application. An official transcript is required.
- Have acceptable physical health as determined by a physician to be able to safely perform the tasks of a construction electrician, including drug testing.
- Have evidence of a qualifying grade on an aptitude test as prescribed by the EJATT Local Union 134. The aptitude test covers English and Mathematics comprehension along with a spatial ability evaluation.

Additional Programs of Study

Each student must achieve a minimum grade of "C" for all courses required to complete the degree. An overall grade point average of 2.0 or better must be maintained.

#### **General Education**

15 CH

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

English (035) 101 Composition	3 CH
History (085) 113 U.S. Labor History	3 CH
Psychology (087) 206 Business and Industrial Psychology 210 Principles of Supervisory Psychology	3 CH 3 CH
<b>432 IBEW</b> 714 Technical Math I	3 CH
Required Program Core	50 CH
432 IBEW 704 Construction Technology	4.5 CH
705 Print Reading I	3.5 CH
707 Fire Alarm Systems	3.5 CH
709 Print Reading II	3 CH
711 Communications	4 CH
715 Technical Math II	3 CH
716 Electronics	4.5 CH
717 Structured Wiring	4.5 CH
718 Integrated System I	3.5 CH
719 Integrated Systems II	4.5 CH
720 Communications Systems Verification	3.5 CH
721 Fiber Optics	3.5 CH
722 Computer Networking	4.5 CH
Total Program Minimum Credit Hours	65 CH

#### **Communications Technology 709**

#### Advanced Certificate (AC)

36.5 CH

20 CH

The purpose of this program is to prepare students to become an apprentice under the tutelage of a union electrical contractor. Communications Journeyman and Apprentices install and maintain structured wiring and electronic systems in the residential, commercial, and industrial settings.

Required Program Core 432 IBEW	36.5 CH
704 Construction Technology	4.5 CH
705 Print Reading	3.5 CH
709 Print Reading II	3 CH
714 Technical Math I	3 CH
715 Technical Math II	3 CH
716 Electronics	4.5 CH
717 Structured Wiring Systems	4.5 CH
718 Integrated Systems I	3.5 CH
721 Fiber Optics	3.5 CH
725 Low Voltage Systems	3.5 CH
Total Program Minimum Credit Hours	36.5 CH

#### Communications Technology 704 Basic Certificate (BC)

The purpose of this program is to prepare students to become an apprentice under the tutelage of a union electrical contractor. Communications Journeymen and Apprentices install and maintain structured wiring and electronic systems in residential, commercial, and industrial settings.

Required Program Core	20 CH
432 IBEW	
704 Construction Technology	4.5 CH
705 Print Reading	3.5 CH
714 Technical Math I	3 CH
716 Electronics	4.5 CH
717 Structured Writing	4.5 CH
Total Program Minimum Crodit Hours	20 CH

Total Program Minimum Credit Hours20 CH

Construction Management 375Associate in Applied Science (AAS)65 CH

The AAS degree program in Construction Management prepares students to receive the education, training, and business knowledge necessary for employment in the construction industry. The program offers classroom and lab experiences led by instructors who are experienced as superintendents or project managers for some of the largest construction firms in the country.

Additional Programs of Study

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See page 196 for AAS general education degree requirements.

Required Program Core	41 CH
Business (030)	
181 Financial Accounting	4 CH
269 Principles of Management	3 CH
CIS (032)	
120 Introduction to Microcomputers	3 CH
432CMGT	
601 Introduction to Construction	2 CH
602 Methods of Building Construction	3 CH
603 Building Materials and Testing	3 CH
604 Blueprint and Specifications	3 CH
605 Construction Cost Estimating	3 CH
606 Construction Contracting Specifications	3 CH
607 Construction Scheduling/Management	3 CH
608 Project Management	3 CH
609 Construction Safety II	3 CH
English (035)	
107 Report Writing	3 CH
332TECH	
449 Professional Development	2 CH
Electives	9 CH

Consult with a College Advisor for selection of a minimum of three courses from the following disciplines: Business, CIS, Construction Technology, and Environmental Science.

#### **Total Program Minimum Credit Hours**

#### **Electrical Construction Technology 752**

#### **Associate in Applied Science (AAS)**

15 CH

The AAS degree program in Electrical Construction Technology is a cooperative effort between Richard J. Daley College and the Electrical Joint Apprenticeship and Training Trust (EJATT) which is made up of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local Union 134. Through the joint effort of the college and EJATT, the program is dedicated to consistently providing state-of-the art education and training to apprentices, and through them to the residential and commercial building contractors in the Chicagoland area. This commitment to both the individual and industry requires not only providing electricians for today's market, but also looking toward tomorrow's market and future technologies.

Daley College and the EJATT are working cooperatively in order to structure the program to benefit the students in meeting their educational and career objectives while maintaining integrity and guality within the program. Selection for admission into the program is a rigorous process which functions to ensure that the most qualified candidates are selected by both the City Colleges of Chicago and the selection process established by the EJATT Local Union 134 which follows the guidelines of federal and state laws regulating admission into a registered apprenticeship program.

- Graduation from an accredited high school or acceptable scores on the General Education Development (GED) test. Foreign and domestic high school education or domestic GED must be validated by official transcripts. Official transcripts will be accepted in place of the high school diploma if the graduation date is provided.
- At least 18-years-old, prior to application.
- Have taken two semesters of algebra (at high school or college) with a minimum of "C" grade in each semester, completed prior to application. An official transcript is required.
- · Have acceptable physical health as determined by a physician to be able to safely perform the tasks of a construction electrician, including drug testing.
- · Have evidence of a qualifying grade on an aptitude test as prescribed by the EJATT Local Union 134. The aptitude test covers English and Mathematics comprehension along with a spatial ability evaluation.

Each student must achieve a minimum grade of "C" for all courses required to complete the degree. An overall grade point average of 2.0 or better must be maintained.

#### **General Education**

15 CH

3 CH

65 CH

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See page 196 for AAS general education degree requirements.

English (035) 101 Composition

**Additional Programs of Study** 

History (085)	
113 U.S. Labor History	3 CH
Psychology (087)	
206 Business and Industrial Psychology	3 CH
210 Principles of Supervisory Psychology	3 CH
432 IBEW	
714 Technical Math I	3 CH
Required Program Core	50 CH
432 IBEW	
702 Electrical Circuitry	4.5 CH
703 Conduit Bending I	3.5 CH
704 Construction Technology	4.5 CH
705 Print Reading I	3.5 CH
706 Conduit Bending II	3.5 CH
707 Fire Alarm Systems	3.5 CH
708 Motor Control Systems	3.5 CH
709 Print Reading II	3 CH
710 Programmable Control	4.5 CH
711 Communications	4 CH
712 HVAC Systems	4.5 CH
713 Instrumentation	4.5 CH
715 Technical Math II	3 CH
Total Program Minimum Credit Hours	65 CH

Electrical Construction Technology 721	
Advanced Certificate (AC)	35.5 CH

The purpose of this program is to prepare students to become an apprentice under the tutelage of a union electrical contractor. Electricians assemble, install, maintain, and test electrical equipment and wiring systems in residential, commercial, and industrial settings.

Required Program Core 432 IBEW	35.5 CH
702 Electrical Circuitry	4.5 CH
703 Conduit Bending I	3.5 CH
704 Construction Technology	4.5 CH
705 Print Reading	3.5 CH
706 Conduit Bending II	3.5 CH
708 Motor Control Systems	3.5 CH
709 Print Reading II	3 CH
714 Technical Math I	3 CH
715 Technical Math II	3 CH
725 Low Voltage Systems	3.5 CH
Total Program Minimum Credit Hours	35.5 CH

Electrical Construction Technology 703

#### **Basic Certificate (BC)**

19 CH

The purpose of this program is to prepare students to become an apprentice under the tutelage of a union electrical contractor. Electricians assemble, install, maintain, and test electrical equipment and wiring systems in residential, commercial, and industrial settings.

Required Program Core	19 CH
432 IBEW	
702 Electrical Circuitry	4.5 CH
703 Conduit Bending I	3.5 CH
704 Construction Technology	4.5 CH
705 Print Reading	3.5 CH
714 Technical Math I	3 CH
Total Program Minimum Credit Hours	19 CH

EDUCATION

## Child Development: Bilingual Teacher Aide 276Associate in Applied Science (AAS)61 CH

The AAS in Child Development: Bilingual Teacher Aide prepares graduates to assist teachers of elementary school children in bilingual education in before or after school settings. The program is also for bilingual aides in the public school system, aides who will have contact with the bilingual classroom, dual language classroom, or English as a second language classroom.

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

Required Program Core	40 CH
Child Development (090)	
101 Human Growth and Development I	4 CH
102 Human Growth and Development II	3 CH
107 Health, Safety, and Nutrition	3 CH
201 Observation and Management of Child Behavior*	3 CH
262 Child, Family and Community Relations	3 CH
Education (083)	
260 Principles of Practice in Elementary Education	3 CH
269 Practicum in Elementary Education**	6 CH
*Requires completion of clinical experience/observation hours **Course is held in school age setting	

Additional Programs of Study

#### Linguistics (132)

ives	6 CH
201 Issues in First and Second Language Acquisition	3 CH
104 Cross Cultural/Multicultural Education	3 CH
103 Instructional Media for Second Language Training	3 CH
102 Introduction to Linguistics	3 CH
101 Language and Culture	3 CH

#### Electives

Students should meet with a College Advisor for selection of elective courses.

#### Total Program Minimum Credit Hours 61 CH

#### Child Development: Pre-School Education Infant/ Toddler 286

Advanced Certificate	AC)	32 CH
Advanced Certificate	AC)	32 СП

The Advanced Certificate program in Child Development: Pre-School Education Infant/Toddler prepares students for employment in center or home-based programs that provide daycare for infants and toddlers. The study of child development theory and skills is necessary for those interested in becoming "nannies" or live-in infant and childcare providers.

Required Program Core	29 CH
Child Development (090)	
101 Human Growth and Development I*	4 CH
107 Health, Safety, and Nutrition	3 CH
109 Language and Literacy Development in Early Childhood	3 CH
120 Introduction to Early Childhood Education Group Care of Children	3 CH
142 Methods and Materials for Infant and Toddler Care	3 CH
201 Observation, Assessment, and Documentation to Support Young Children and Families*	3 CH
248 Principles and Practice of Infant and Toddler Care	4 CH
259 Practicum in Pre-School**	6 CH
*Requires completion of clinical experience/observation hours **Course is held in school age setting	
Electives	
Select one Child Development course from the following:	
Child Development (090) 230 Introduction to Early Intervention	3 CH
262 Child, Family, and Community Relations	3 CH

Total Program Minimum Credit Hours

#### **Elementary Education 280**

#### Associate in Applied Science (AAS)

61 CH

The AAS in Child Development: Elementary Education offers courses in child development theory and the skills needed to assist teachers of elementary school children or for graduates to work in after-school care programs.

#### **General Education**

15 CH

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

Required Program Core	31 CH
Child Development (090) 101 Human Growth and Development I	4 CH
102 Human Growth and Development II <b>OR</b> 149 Creative Activities For Young Children	3 CH
107 Health, Safety, and Nutrition	3 CH
109 Language Development	3 CH
120 Introduction to Early Childhood Education	
Group Care of Children	3 CH
143 Science and Math for the Young Child	3 CH
201 Observation, Assessment, and Documentation to Support Young Children and Families*	3 CH
Education (083)	
260 Principles of Practice in Elementary Education	3 CH
269 Practicum in Elementary Education**	6 CH
*Requires completion of clinical experience/observation hours **Course is held in school age setting	
Electives 15 CH	

The Child Development, Psychology and Sociology courses listed below are recommended for elective credit:

Child Development (090) 205 Development of the Exceptional Child	3 CH
Psychology (087)	
201 General Psychology	3 CH
207 Child Psychology	3 CH
Sociology (089)	
201 Introduction to the Study of Society	3 CH
203 Marriage and the Family	3 CH
Total Program Minimum Credit Hours	61 CH

Additional Programs of Study

2 CH

#### **Elementary Education 284**

#### Advanced Certificate (AC)

Required Program Core Child Development (090)	31 CH
101 Human Growth and Development I*	4 CH
102 Human Growth and Development II	3 CH
107 Health, Safety, and Nutrition	3 CH
109 Language and Literacy Development in Early Childhood	3 CH
120 Introduction to Early Childhood Education Group Care of Children	3 CH
143 Science and Math for the Young Child	3 CH
201 Observation, Assessment, and Documentation to Support Young Children and Families*	3 CH
Education (083)	
260 Principles of Practice in Elementary Education	3 CH
269 Practicum in Elementary Education**	6 CH
*Requires completion of clinical experience/observation hours **Course is held in school age setting	
Elective	3 CH
Students should meet with a College Advisor for selection of one	elective

course.

**Total Program Minimum Credit Hours** 

HEALTHCARE	
Dental Assistant 868	
Basic Certificate (BC)	4 CH

In the Dental Assistant certificate program, students learn the comprehensive and varied duties of a dental assistant. This career choice will enable students to become part of the dental healthcare team. Students will learn office procedures, inventory, dental charting, and the basics of assisting the dentist. Topics will include the introduction to definition, cavity classification, instruments, oral surgery, procedures, and techniques, as well as basic tray setups, aseptic practices, and restoration methods.

Required Program Core	4 CH
CE Health (500)	
107 Communications for Healthcare	1 CH
115 Dental Assisting I	1 CH
116 Dental Assisting II	1 CH
117 Dental Assisting III	1 CH
Total Program Minimum Credit Hours	4 CH

### EKG Technician 830

#### Basic Certificate (BC)

34 CH

34 CH

This comprehensive 33-hour EKG Technician certificate program provides, hands-on training experience using an EKG arm. Students will also learn to take and interpret EKG readings. Topics cover anatomy and physiology of the heart, medical disease processes, medical terminology, medical ethics, legal aspects of patient contacts, and the use of the EKG monitor.

	•
Required Program Core CE Health (500)	2 CH
158 EKG Technician	2 CH
Total Program Minimum Credit Hours	2 CH
Emergency Medical Technician: Basic 252	
Basic Certificate (BC)	8 CH
Program Requirements for Admission	
<ul> <li>Official high school transcript or GED certificate showing date of graduation or completion</li> </ul>	
<ul> <li>18 years of age or older</li> </ul>	
<ul> <li>Must be eligible to enroll in or have passed English 101 o successful completion of EMT 100 – Emergency Medical Technician-First Responder Training course</li> </ul>	
Must complete interview with program director	
Required Program Core	8 CH
Emergency Medical Technician (120) 101 Emergency Medical Technician-Basic	8 CH
Total Program Minimum Credit Hours	8 CH
Emergency Medical Technician 867	
Basic Certificate (BC)	9 CH
The EMT certificate program provides training to recognize the extent of patients' condition, administer appropriate emergency care to stabilize their condition, and transport them safely to the saf	/ medical

care to stabilize their condition, and transport them safely to the proper medical facility. The curriculum follows the United States Department of Transportation (DOT) guidelines for EMT-B Training. Students receive appropriate in-class clinical, lecture, CPR training/ certification and ten (10) hours of hands-on in a hospital clinical setting.

Total Program Minimum Credit Hours	9 CH
151 EMT Basic Clinical II	6 CH
150 EMT Basic Clinical I	3 CH
CE 014 (0014)	

## Emergency Medical Technician II: Paramedic 263Associate in Applied Science (AAS)61 CH

In addition to the Advanced Certificate, Malcolm X College offers the only paramedic program in the City of Chicago and is one of the few colleges in Illinois to offer an Associate in Applied Science Degree (AAS) in this professional specialty. Successful completion of the Paramedic Core Curriculum, in addition to complementary general education courses, enables the paramedic student to attain an AAS degree. Completion of the degree can broaden the student's marketability as well as provide a strong basis for continued professional learning.

This program is presented as a collaborative effort by Malcolm X College, the Chicago Fire Department, and the Chicago Resource Hospitals: Advocate Illinois Masonic Medical Center, Northwestern Memorial Hospital, and University of Chicago Hospitals. The Paramedic Program is approved and accredited by the Illinois Department of Public Health, Division of Emergency Medical Services and Highway.

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

English (02E)	
English (035)	2 (11
101 Composition	3 CH
Biology (023)	
120 Terminology for Medical Careers	3 CH
Sociology (089)	
201 Introduction to the Study of Society	3 CH
Psychology (087)	
201 General Psychology	3 CH
Communications elective	3 CH
Communications elective	• • • •
Physical/Life Sciences electives	3 CH
Fine Arts and Humanities and	9 CH
Social and Behavioral Sciences	
Required Program Core	34 CH
Emergency Medical Technician (120)	
221 Essentials of Paramedic Medicine I	9 CH
222 Paramedic Medicine Practicum I	5 CH
223 Essentials of Paramedic Medicine II	9 CH
224 Paramedic Medicine Practicum II	5 CH
227 Field Internship	6 CH

For further information about attaining an Associate in Applied Science degree in Emergency Medical Services, contact the EMS Program Office at (312) 850-7124.

#### **Total Program Minimum Credit Hours**

## Emergency Medical Technician II: Paramedic 265Advanced Certificate (AC)34 CH

The Advanced Certificate in the Paramedic Program is awarded to the student that successfully completes the Paramedic Core Curriculum. Courses run for three consecutive semesters starting each fall. Applications are accepted the previous spring. Successful completion of the core curriculum provides eligibility to take the licensing examination offered by the Illinois Department of Public Health or the National Registry of EMTs.

#### **Program Requirements for Admission**

Courses runs for three consecutive semesters starting each fall semester, Applications are accepted the previous spring. To be considered for admission the applicant must:

- Be a high school graduate or GED Certificate holder
- Be currently licensed by the State of Illinois as an EMT-B

**Note:** Students enrolled in a current spring semester EMT class who have not completed the state exam are not eligible to apply unless from a MXC EMT class with acceptable course grade.

- Earn a passing grade in Biology 116, equivalent AandP course or higher (such as Human Structure and Function/BIO 226 and 227)
- Have a current CPR card
- Ambulance experience as an EMT-B (approximately 500 hours) by start of program is strongly recommended
- Achieve acceptable scores on admissions examinations

Submit, by deadline, completed program application with transcripts, to the Paramedic Program Director at Malcolm X College

#### Applicant Interviews

Interviews with the EMS Region XI Admissions Committee are granted to those applicants who have met or exceeded admission criteria.

#### Selection Factors

27 CH

Selection of candidates for this program is highly competitive and conducted by interview process. Evaluation of applicant ability is based on academic history, EMS work experience, references, and communication skills. Emphasis is placed on academic history as demonstrated by GPA, and motivation as demonstrated by experience in the EMS field.

#### **Required Program Core**

#### **First Semester**

Emergency Medical Technician (120)	
221 Essentials of Paramedic Medicine I	9 CH
222 Paramedic Medicine Practicum I	5 CH
Semester Total Credit Hours	14 CH
Second Semester	
223 Essentials of Paramedic Medicine II	9 CH
224 Paramedic Medicine Practicum II	5 CH

14 CH

#### Semester Total Credit Hours

**Additional Programs of Study** 

Third Semester	
227 Field Internship	6 CH
Semester Total Credit Hours Total Program Minimum Credit Hours	6 CH 34 CH

## Gerontology Aide 339Basic Certificate (BC)12 CH

This Basic Certificate program is designed to create the credentials needed to become a Gerontology Aide, or provides extra credentialing for individuals already in a related field who wish to add Gerontology coursework to their credentials.

Required Program Core	12 CH
<b>Psychology (087)</b> 222 Adult Development and Aging	3 CH
Social Service (091) 102 Introduction to Gerontology	3 CH
105 Physiology of Aging	3 CH
250 Practicum I	3 CH
Total Program Minimum Credit Hours	12 CH

#### Gerontology Specialist 340

#### Associate in Applied Science (AAS) 61 CH

The AAS degree program for Gerontology Specialist prepares students for entry level in the field, a human services position that qualifies the individual for work in federal, state, and local agencies, both private and public, that provide outreach services for the elderly.

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

Biology (023) 115 Human Biology	4 CH
CIS (032) 120 Introduction to Microcomputers	3 CH
English (035) 101 Composition	3 CH
Psychology (087) 201 Introduction to Psychology	3 CH
Arts/Humanities and Social/Behavioral Sciences	6 CH

Required Program Core Psychology (087)	36 CH
222 Adult Development and Aging	3 CH
223 Death, Dying and Bereavement	3 CH
Social Service (091)	
102 Introduction to Gerontology	3 CH
103 Aging and Social Policy	3 CH
105 Physiology of Aging	3 CH
106 Aging and the Family	3 CH
107 Aging and Leisure	3 CH
202 Aging and Human Services	3 CH
203 Interpersonal Communication with Elderly	3 CH
204 Cross-Cultural Studies in Gerontology	3 CH
250 Practicum I	3 CH
251 Practicum II	3 CH
Electives	6 CH
Select a minimum of two Gerontology course electives recommended by a College Advisor.	
Total Program Minimum Credit Hours	61 CH
Basic Nursing Assistant/Nursing	
Fundamentals 404	
Basic Certificate (BC)	4 CH

Successful completion of the Nursing 156 and 157 courses entitles a person to take the certification exam which is necessary to become a Certified Nursing Assistant (CNA) in the State of Illinois.

Required Program Core	4 CH
Nursing (063)	
156 Nursing Fundamentals I	2 CH
157 Nursing Fundamentals II	2 CH
Total Program Minimum Credit Hours	4 CH

**Additional Programs of Study** 

#### **Pharmacy Technician 802**

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Basic Certificate (BC)*
*Pending ICCB Approval
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The Pharmacy Technician certificate program provides comprehensive training that prepares students to enter the pharmacy field to work in hospitals, community, and retail pharmacies. Emphasis is placed on definitions of drugs by name and the reading and interpretation of medical prescriptions. Students will also learn I.V. flow rate, dosage calculations, drug compounding and dose conversions, inventory control and much more. Clinical experience will be included. The program is designed to prepare students for the national certification examinations.

Required Program Core	8.5 CH
CE Health (500)	
171 Pharmacy I	2 CH
172 Pharmacy II	2 CH
173 Pharmacy III	4.5 CH
Total Program Minimum Credit Hours	8.5 CH

#### Physical Therapy Assistant 406

Associate in Applied Science (AAS)*	70 CH
*Pending ICCB Approval	

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

English (0035) 101 Composition	3 CH
Biology (0023) 116 Anatomy and Physiology	4 CH
Math (0045) 118 General Education Mathematics	4 CH
Humanities (0041) 212 Non-Western Humanities	3 CH
Social Science (0088) 101 General Course I Social Science	3 CH

#### **Required Program Core 53CH**

8.5 CH

17 CH

Total Program Minimum Credit Hours	70 CH
Health Professions (0146) 102 Health Career Studies	3 CH
110 Functional Anatomy	3 CH
102 Personal Exercise Trainer Practicum	4 CH
Exercise Science and Sports Studies (0147) 101 Certified Personal Trainer Prep	4 CH
280 Physical Therapy Assistant Topics	2 CH
260 Advanced PTA Clinical Education	10 CH
230 Therapeutic Procedures IV	5 CH
221 PTA Clinical Education II	2 CH
211 PTA Clinical Education I	2 CH
200 Pathophysiology	3 CH
190 Therapeutic Procedures III	3 CH
170 Therapeutic Procedures II	3 CH
160 Therapeutic Exercise	4 CH
150 Therapeutic Procedures I	3 CH
Physical Therapy Assistant (0151) 110 Intro to Physical Therapy	2 CH
nequireu riogram core 550m	

## INFORMATION TECHNOLOGY

## A+ Certified Computer Technician 806Basic Certificate (BC)6 CH

The A+ Certified Computer Technician certificate program is an internationally recognized credential backed by major computer hardware and software companies. As a CompTIA Certified A+ Technician, graduates will be able to: analyze computer problems; disassemble any computer for rebuild or upgrade; design and operate a company's computer maintenance; recommend compatible hardware and software; and limit downtime and expensive repairs by providing immediate in- house action.

CE Business Management (502)	
240 Introduction to PC Hardware	1 CH
241 PC Repair and Troubleshooting	2.5 CH
242 PC Operating Systems	2.5 CH
Total Program Minimum Credit Hours	6 CH

**Additional Programs of Study** 

#### **Computer Information Systems 011**

#### **Associate in Applied Science (AAS)**

The study of basic business and technical principles used in programming and operating personal computers. The AAS can lead to entry-level jobs as computer programmer, programmer analyst, systems analyst, operations manager, network administrator, or unit supervisor in private and public firms or organizations. Advances in technology have increased the computer's application in the factory, the office and the telecommunications industry. As computer use grows, so will the need for workers who are able to cope with change and adapt to new technologies.

60 CH

15 CH

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See page 196 for AAS general education degree requirements.

Required Program Core	24 CH
CIS (032)	0.011
101 Computer Science 101	3 CH
120 Introduction to Microcomputers	3 CH
250 Introduction to Systems	3 CH
Business (030)	
111 Introduction to Business	3 CH
181 Financial Accounting	4 CH
182 Managerial Accounting	4 CH
Math (045)	
18 General Education Mathemathics	4 CH
or any Mathematics course 118 or above	
Additional CIS Required Courses	
Select four courses from the following:	
CIS (032)	
103 Introduction to Basic Language	3 CH
122 Introduction to Word Processing on Microcomputers	3 CH
142 Introduction to C or C++ Language	3 CH
144 Introduction to JAVA Programming Language	3 CH
145 Introduction to Database on Microcomputers	3 CH
158 Beginning Internet	3 CH
181 Web Development I/Basic Web Technology	3 CH
182 Web Development II/Client Side Script	3 CH
244 Advanced JAVA Programming Language	3 CH
258 Advanced Internet	3 CH
Electives 0.04	

#### **Computer Information Systems 013** Α

Computer information Systems 013		
Advanced Certificate (AC)	30 CH	
Required Program Core 14		
CIS (032)	0.011	
101 Computer Science 101	3 CH	
250 Introduction to Systems	3 CH	
Business (030)		
181 Financial Accounting	4 CH	
182 Managerial Accounting	4 CH	
Additional CIS Required Courses 9 CH		
Select three courses from the following CIS discipline or othe recommended courses by a College Advisor:		
CIS (032)		
103 Introduction to Basic Language	3 CH	
120 Introduction to Microcomputers	3 CH	
122 Introduction to Word Processing on Microcomputers	3 CH	
142 Introduction to C or C++ Language	3 CH	
144 JAVA I	3 CH	
145 Introduction to Database on Microcomputers	3 CH	
158 Beginning Internet	3 CH	
181 Web Development I	3 CH	
182 Web Development II	3 CH	
235 Advanced COBOL Programming	3 CH	
244 JAVA II	3 CH	
258 Advanced Internet	3 CH	
Electives 7 CH		
Students should meet with a College Advisor for selection of elective courses.		
Total Program Minimum Credit Hours	30 CH	

#### **Electives 9 CH**

Students should meet with a College Advisor for selection of elective courses.

Total Program	Minimum	Credit Hours
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Additional Programs of Study

#### **Computer Information Systems 012 Basic Certificate (BC)** 12 CH **Required Program Core** 6 CH CIS (032) 3 CH 101 Computer Science 101 120 Introduction to Microcomputers 3 CH **CIS Electives** 6 CH Select two courses from the following or other recommended courses by a College Advisor: CIS (032) 3 CH 103 Introduction to Basic Language 122 Introduction to Word Processing on Microcomputers 3 CH 1. Video and Sound 142 Introduction to C or C++ Language 3 CH 2. 3D Graphics 144 JAVA I 3 CH 3. Interactive Media 3 CH 145 Introduction to Database on Microcomputers 3 CH 158 Beginning Internet 181 Web Development I/Basic Web Technology 3 CH **General Education** 182 Web Development II/Client Side Script 3 CH 3 CH 244 Advanced JAVA Programming Language 258 Advanced Internet 3 CH **Total Program Minimum Credit Hours** 12 CH

Web Design 811

**Basic Certificate (BC)** 

5 CH (Non-Transferable)

In the Web Design certificate program, students explore the essential elements of web design and utilize practical activities and step-by-step procedures to design, build, and post a website. Students will create templates for page layout and learn techniques for fine-tuning and modifying prepackaged Web page development software. They will learn how to convert and scale artwork and photographs for Web publication and use tables and templates to organize layouts.

Total Program Minimum Credit Hours	5 CH
0260 Illustrator	1 CH
0259 Photoshop	1 CH
0258 Flash	1 CH
0257 HTML/XHTML	1 CH
0256 Dreamweaver	1 CH
CE BSMT (0502)	

### HUMAN SCIENCES (LIBERAL ARTS)

**Digital Multimedia Design 350** 

**Associate in Applied Science (AAS)** 

67 CH

The AAS degree program in Digital Multimedia Design is designed to prepare students for entry-level positions in the field of interactive and multimedia design and for possible transfer into a four-year institution. Requirements for a major in Digital Multimedia Design will equip students with the necessary skills, both technically and aesthetically, to create digital multimedia presentations; output can be delivered on CD, DVD, video, or in the form of web pages over the Internet.

The program has three required areas of specialization:

Note: Also see individual Basic Certificate programs for Video and Sound 352, 3D Graphics 353, and Interactive Media 354.

#### 16 CH

Students should meet with a College Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See Human Diversity section on page 9. See page 196 for AAS general education degree requirements.

Biology (023) or Physical Science (076)	3 CH
English (035) 101 Composition	3 CH
Fine Arts (042)	
107 History of Architecture, Painting, and Sculpture I	3 CH
Math (045)	
118 General Education Math or higher	4 CH
Social Science (088)	3 CH
Required Program Core	24 CH
Art (010)	
131 General Drawing	3 CH
142 Figure Draw and Composition	3 CH
144 Two Dimensional Design	3 CH
145 Three Dimensional Design	3 CH
Digital Multimedia (138)	
168 Advanced Computer Art I	3 CH
299 Portfolio and Professional Practice Seminar	3 CH
Fine Arts (042)	
104 The World of Cinema	3 CH
108 History of Architecture, Painting and Sculpture II	3 CH

**Additional Programs of Study** 

Specialization Areas	
1) Video and Sound	9 CH
Digital Multimedia (138)	
115 Digital Audio	3 CH
179 Digital Video I	3 CH
279 Digital Video II	3 CH
2) 3D Graphics	9 CH
Digital Multimedia (138)	
105 2D Animation	3 CH
121 3D Modeling	3 CH
221 3D Animation	3 CH
3) Interactive Media	9 CH
Digital Multimedia (138)	
131 Beginning Multimedia Design and Development	3 CH
231 Intermediate Multimedia Design and Development	3 CH
233 Advanced Multimedia Design and Development	3 CH
Total Program Minimum Credit Hours	67 CH
Digital Multimedia Design 351	
Advanced Certificate (AC)	30 CH
Required Program Core	27 CH
Art (010)	
131 General Drawing	3 CH
176 Graphic Design I	3 CH

**Digital Multimedia (138)** 130 Principles of Design and Development for Digital Media 3 CH

131 Beginning Multimedia Design and Development	3 CH
IST Degining multimetia Design and Development	3 СП
168 Computer Art I	3 CH
231 Intermediate Multimedia Design and Development	3 CH
233 Advanced Multimedia Design and Development	3 CH
268 Advanced Computer Art	3 CH
299 Portfolio and Professional Practice Seminar	3 CH
Electives	3 CH
Select one course from the following elective courses:	
105 Animation	3 CH
121 3D Graphics I	3 CH
179 Digital Video I	3 CH
Total Program Minimum Credit Hours	

Digital Multimedia Design 354		
Basic Certificate (BC)		
Required Program Core Art (010) 176 Graphics Design I		
CIS (032) 120 Introduction to Microcomputers	3 CH	
Digital Multimedia (138) 131 Beginning Multimedia Design and Development	3 CH	
168 Advanced Computer Art I 231 Intermediate Multimedia Design and Development	3 CH 3 CH 3 CH	
233 Advanced Multimedia Design and Development Total Program Minimum Credit Hours		

#### **Social Work: Generalist 313 Associate in Applied Science (AAS)** 66 CH

The AAS degree in Social Work includes the study of the generalist approach to working with the individual, family, group, and community. The degree can lead to employment as an aide to a social worker in government, community, or private social service agencies.

#### **General Education**

degree requirements.

15 CH Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See page 196 for AAS general education

Required Program Core	37 CH
Child Development (090)	4.011
101 Human Growth and Development I*	4 CH
102 Human Growth and Development II	3 CH
107 Health, Safety, and Nutrition	3 CH
*Requires completion of clinical experience/observation hours	
Mental Health (118)	
223 Introduction to Addictions Studies	3 CH
Social Services (091)	
101 Introduction to Social Work	3 CH
109 Report Writing for Social Service Aides	3 CH
201 Principles of Social Work Practice	3 CH
212 Introduction to Group Process	3 CH
215 Social Problems and Social Action I	3 CH
228 Methodology for Social Work	3 CH
229 Practicum in Social Service	6 CH
Electives	

**Additional Programs of Study** 

#### **Recommended Areas of Supporting Coursework:**

Students are urged to take elective courses in Psychology, Sociology, Child Development, Anthropology, Criminal Justice, and Addiction Studies to become familiar with various approaches to individual, group, or societal problems. In addition, Computer Information Systems 120–Introduction to Microcomputers and English 102–Composition, are strongly recommended. Meet with a College Advisor for course selection.

Total Program Minimum Credit Hours	66 CH
Social Work: Generalist 317	
Advanced Certificate (AC)	37 CH
Required Program Core	37 CH
Child Development (090)	
101 Human Growth and Development I*	4 CH
102 Human Growth and Development II	3 CH
107 Health, Safety, and Nutrition	3 CH
*Requires completion of clinical experience/observation hours	
Mental Health (118)	
223 Introduction to Addictions Studies OR	3 CH
228 Principles of Social Work Practice	
Social Services (091)	
101 Introduction to Social Work	3 CH
109 Report Writing for Social Service Aides	3 CH
201 Principles of Social Work Practice	3 CH
212 Introduction to Group Process	3 CH
215 Social Problems and Social Action I	3 CH
228 Methodology for Social Work	3 CH
229 Practicum in Social Service	6 CH
Total Program Minimum Credit Hours	37 CH
Social Work: Youth Work 370	
Associate in Applied Science (AAS)	63 CH

The AAS degree in Social Work: Youth Work can lead to employment in government, community, or private social service agencies. Enrollment in the program is open to anyone interested in working with youth during outof-school time, e.g. after-school workers, school-age workers, grassroots youth workers, community activists, outreach workers, probation officers, prevention specialists, teen reach workers, managers, and supervisors. As an option under Social Work, the academic program for the professional development worker includes basic and advanced certificates and an Associate in Applied Science degree. Where applicable, under this professional development option, college credit will be awarded for prior learning experiences up to a maximum of fifteen credit hours.

#### **General Education**

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See <u>page 196</u> for AAS general education degree requirements.

16 CH

English (035)	
101 Composition	3 CH
Humanities (041)	3 CH
Mathematics (045)	
118 General Education Mathematics	4 CH
Physical Science (076) Social Science (088)	3 CH
101 General Course I Social Science	3 CH
Required Program Core	37 CH
Business (030)	
269 Principles of Management	3 CH
Child Development (090)	
101 Human Growth and Development I*	4 CH
102 Human Growth and Development II	3 CH
Mental Health (118)	
223 Introduction to Addiction Studies	3 CH
228 Principles of Mental Health Practices	3 CH
Psychology (087)	
211 Social Psychology	3 CH
Social Service (091)	
109 Report Writing in Social Work	3 CH
212 Introduction to Group Process	3 CH
215 Social Problems and Social Action I	3 CH
248 Principles of Youth and Group Work	3 CH
249 Practicum in Youth Work	6 CH
Electives	10 CH
Observe a stand of the second se	

Students should meet with a College Advisor for selection of elective courses.

Total Program Minimum Credit Hours 63 CH

**Additional Programs of Study** 

#### **Social Work: Youth Work 371**

Advanced Certificate (AC)	31 CH
Required Program Core	31 CH
Child Development (090)	
101 Human Growth and Development I*	4 CH
102 Human Growth and Development II	3 CH
Mental Health (118)	
223 Introduction to Addiction Studies	3 CH
228 Principles of Mental Health Practice	3 CH
Social Services (091)	
109 Report Writing for Social Service Aides	3 CH
212 Introduction to Group Process	3 CH
215 Social Problems and Social Action I	3 CH
248 Principles of Youth and Group Work	3 CH
249 Practicum in Youth Work	6 CH
*Requires completion of clinical experience/observation hours	
Total Program Minimum Credit Hours	31 CH
Social Work: Youth Work 372	
Basic Certificate (BC)	15 CH
Required Program Core	15 CH
Social Services (091)	
109 Report Writing for Social Service Aides	3 CH
215 Social Problems and Social Action I	3 CH
248 Principles of Youth and Group Work	3 CH
249 Practicum in Youth Work	6 CH
Total Program Minimum Credit Hours	15 CH

#### **Visual Media Communications 165** Associate in Applied Science Degree (AAS) 64 CH

The AAS degree program in Visual Media Communications is a creative hybrid learning environment that challenges students to acquire competent skills in art, graphics, website, and animation design. Students train as visual designers and entrepreneurs in the visual communication industry.

The program offers a 61 credit hour AAS with a focus in Graphic Design. Graduates' real-world design projects will be documented on a website and traditional portfolio for future employment and client presentations.

#### **General Education**

#### 16 CH

Students should meet with a College Advisor for selection of specific course requirements for the 15 credit hour minimum general education portion of the AAS degree. See page 196 for AAS general education degree requirements.

English (035) 101 Composition	3 CH
Mathematics (045) 118 General Education Mathematics or higher Excluding Mathematics 140	4 CH
Fine Arts (042) 107 History of Architecture, Painting, and Sculpture	3 CH
<b>Theater Art (099)</b> Fine Arts and Humanities and Social and Behavioral Sciences	6 CH
Required Program Core	36 CH
Visual Communications (009)	
101 Introduction to Visual Communications	3 CH
102 Website Design I	3 CH
104 Digital Photography	3 CH
110 Production Printing	3 CH
122 Graphic Software	3 CH
132 Publication Design	3 CH
134 Logo Identity Design	3 CH
202 Website Design II	3 CH
212 Motion Graphics I	3 CH
224 Digital Typography	3 CH
298 Design Studio	3 CH
290 Practicum Internship	3 CH
Electives (Recommended) Art (010)	12 CH
131 General Drawing	3 CH
144 Two-Dimensional Design	3 CH
181 Web Development I/Basic Web Tech	3 CH
Cooperative Work Experience (008) 108 Cooperative Work Experience	3 CH
Media Communications (011) 271 Introduction to Interactive Media	3 CH
Total Program Minimum Credit Hours	61 CH

Additional Programs of Study

101 Introduction to Visual Communication

Visual Media Communications 166

**Advanced Certificate (AC)** 

Visual Communications (009)

104 Digital Photography

122 Graphic Software

132 Publication Design

134 Logo Identity Design

224 Digital Typography

**Visual Communications (009)** 

201 Design Management

Visual Communications (009) 104 Digital Photography

122 Graphic Software

132 Publication Design

134 Logo Identity Design

224 Digital Typography

Visual Communications (009)

102 Website Design I

132 Publication Design

202 Website Design II 212 Motion Graphics I

224 Digital Typography

**Total Program Minimum Credit Hours** 

**Total Program Minimum Credit Hours** 

Visual Media Communications/Web Page

102 Website Design I

**Basic Certificate (BC)** 

**Required Program Core** 

**Design 193** 

**Basic Certificate (BC)** 

**Required Program Core** 

**Cooperative Work Experience (008)** 

108 Cooperative Work Experience

**Total Program Minimum Credit Hours** 

Visual Media Communications/Page Layout 192

Electives (Recommended)

**Required Program Core** 

#### NATURAL SCIENCES

#### **Biotechnology 215**

30 CH

18 CH

3 CH

3 CH

3 CH

3 CH

3 CH

3 CH

12 CH

6 CH

3 CH

3 CH

30 CH

15 CH

15 CH

3 CH

3 CH

3 CH

3 CH

3 CH

15 CH

15 CH

15 CH

3 CH

3 CH

3 CH

3 CH

3 CH

15 CH

Associate in Applied Science (AAS)

67 CH

8 CH

The AAS degree program in Biotechnology utilizes cellular components and microorganisms for the production of products used in medicine, pharmacology, agriculture, food processing, and environmental cleanup. Employment opportunities are available in laboratories, hospitals, and research and development companies.

#### **Program Requirements for Admission**

- 1. Completion of the Biotechnology program application
- Graduation from an accredited high school or acceptable scores on the General Education Development (GED) test. Foreign and domestic high school education or domestic GED must be validated by official transcripts.
- 3. Validation of previous college or biotech education by official transcripts
- 4. Average or above-average high school standing with one year of biology
- 5. Algebra, chemistry, and biology courses taken in another country must be repeated in this country
- 6. Acceptable scores on the American College Test (ACT)
- 7. Acceptable scores on the standardized reading test administered by Truman College
- 8. Demonstrated proficiency in speaking and reading English

Each student must achieve a minimum grade of "C" for all courses required to complete the degree. An overall grade point average of 2.0 or better must be maintained.

It is strongly recommended that students take Chemistry 207–Organic Chemistry II and Biology 210–Survey of Biotechnology to be competitive in the Biotechnology industry. Since Biotechnology is highly diverse, it is important that students select courses specific to the industry they are seeking to be employed. They should meet with a College Advisor from the Department of Biology/Biotechnology or Department Chairperson.

#### **General Education**

Students should meet with a College Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See Human Diversity section on page 9. See page 196 for AAS general education degree requirements.

Biology (023) 121 Biology I	5 CH
English (035) 101 Composition	3 CH
Mathematics (045) 125 Introductory Statistics	4 CH

Additional Programs of Study

Required Program Core	43 CH	Chemical Laboratory Technology 137	
Biology (023)		Associate of Applied Science (AAS)	63 CH
122 Biology II	5 CH		
209 Biochemistry	4 CH	study of the development, production and utilization of industrial chemicals and methods used in modern chemical laboratories. The program can lead to employment as a chemical lab technician (working under supervision of conjust tachnicians), anginger, or aciantiti is production or tacting, as well as	
250 Introduction to Molecular Biology	3 CH		
251 Molecular Biology I	4 CH		
252 Molecular Biology II	4 CH		
Chemistry (073)		General Education	16 CH
201 General Chemistry I	5 CH		
205 Organic Chemistry I	6 CH	Students should meet with a College Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinoi	
Mathematics (045)		Human Diversity requirement. See Human Diversity section on g	<u>bage 9</u> . See
140 College Algebra	4 CH	page 196 for AAS general education degree requirements.	
Microbiology (024)		English (035)	
233 General Microbiology	4 CH	101/102 Composition	6 CH
234 Applied Microbiology	4 CH	Mathematics (045)	
Electives	6 CH	140 College Algebra	4 CH
Select a minimum of two courses from the following:		Fine Arts and Humanities, and	
Biology (023)		Social and Behavior Sciences	
107 Nutrition-Consumer Education	3 CH	Required Program Core	31 CH
210 Survey of Biotechnology	3 CH	Chemistry (073)	
Chamietry (072)		201 General Chemistry I	5 CH
Chemistry (073) 204 Quantitative Analysis	5 CH	203 General Chemistry II	5 CH
207 Organic Chemistry II	6 CH	205 Organic Chemistry I	6 CH
217 Introduction to Instrumental Analysis	4 CH	207 Organic Chemistry II	6 CH
	- 011	217 Intro to Instrumental Analysis	4 CH
CIS (032)	0.011	Mathematics (045)	
116 Introduction to Operating Systems	3 CH	Mathematics (045) 207 Calculus and Analytical Geometry I	5 CH
Total Program Minimum Credit Hours	67 CH		
		Electives	16 CH
		Select a minimum of four courses from the following:	
		CIS (032) 120 Introduction to Microcomputers	3 CH

Mathematics (045)

Physics (077)

141 Plane Trigonometry

and Wave Motion (4)

and Magnetism

208 Calculus and Analytical Geometry II

235 Engineering Physics I/Mechanics

236 Engineering Physics II/Electricity

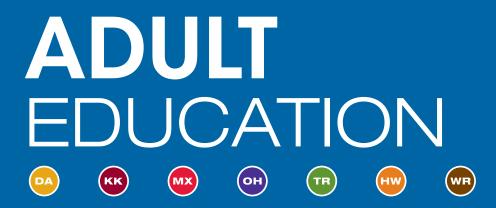
**Total Program Minimum Credit Hours** 

3 CH

5 CH

4 CH

4 CH



# ADULT EDUCATION

## **ADULT EDUCATION (AE)**

**PDF Viewers:** There are interactive features on this page! Click the blue hyperlinks to navigate to their web pages.

Adult Education provides tuition-free programs that help adults become literate, learn English as a second language, obtain high school equivalency, and gain the knowledge, skills and guidance necessary for transition to college and career pathways. Included are courses in Adult Basic Education (ABE), General Educational Development (GED) in both English and Spanish, English as a Second Language (ESL), Citizenship Preparation, sector specific Career Bridge classes, and career exploration courses. To enroll in adult education classes, students must be at least 18 years of age. Students who are 16 or 17 years of age may enroll if they are no longer enrolled in other secondary educational programs and have been officially released from their high school. Classes are offered in a variety of schedules and credit hour formats at each college. Classes are also available at over sixty locations CCC operates in partnership with community and faith based organizations throughout the city. Before enrolling in classes, all students must complete a placement examination to ensure placement in the classes that will be most appropriate for them. For more information about classes and schedules please call the colleges listed below or visit the Adult Education website at: ccc.edu/departments/Pages/Adult-Education.aspx.

North Side Truman College 1145 W. Wilson Avenue Chicago, Illinois 60640 (773) 907-4350

Central Malcolm X College 1900 W. Van Buren Street Chicago, Illinois 60612 (312) 850-7300

Southeast Olive-Harvey College 10001 S. Woodlawn Avenue Chicago, Illinois 60628 (773) 291-6690 Northwest Wright College 4300 N. Narragansett Chicago, Illinois 60634 (773) 481-8821

South Side Kennedy-King College 6301 S. Halsted Street Chicago, Illinois 60621 (773) 602-5340

Southwest Daley College 7500 S. Pulaski Road Chicago, IL 60652 (773) 838-7803

The Adult Education Program offers the following classes and programs:

## Adult Basic Education (ABE)

Adult Basic Education courses serve students who are seeking to become literate or build basic mathematics and English skills on their way to earning a GED® or high school equivalency credential. Our programs teach reading, writing, and math, and computer skills; we also offer programs that assist students in beginning the transition to college-level work while still in adult education.

## Adult Secondary Education/General Educational Development (ASE/GED)

General Educational Development or Adult Secondary Education (ASE/GED) courses prepare students for the GED exam or high school equivalency credential. Courses build skills in reading, writing, math, social studies, science, and civics. Students also learn computer, test taking, and study skills. Students who complete these classes will be prepared to succeed on the high school equivalency exam and also to move on to college level work. This level of instruction is offered in English and Spanish.

The official GED exam is administered through the GED Testing Service. Students interested in applying for a test date may go to https://ged.com/ to sign up; the test is now offered only on a computer and costs \$120. CCC has GED testing centers at a number of its colleges; however, CCC does not set fees or policies relating to test administration.

## ASE/GED and Transition Level Courses and Programs

**i-Pathways (formerly known as GED-i)**— The i-Pathways program is an online GED program that allows students to learn at their own pace at home or another place with computer access. It integrates a broader variety of curriculum options, a solid study plan and helpful tips that are designed to prepare students for their official GED credential, transition into higher education and/or transition into the workforce. To be eligible for i-Pathways, applicants must register on campus and score at least at the Adult Secondary Education (ASE) level.

**Gateway to the City Colleges of Chicago Program**— The Gateway Program provides Adult Education students an opportunity to transition to credit at the City Colleges of Chicago by taking some college credit or career program courses with financial assistance while still in Adult Education. Gateway Scholars can begin their academic careers while developing English language skills or preparing for the GED exam, and can continue pursuing their academic goals once they have completed the Adult Education Program. Depending on the length of time in the program, students will be able to earn credits toward or complete a basic or advanced certificate and/or earn an Associate degree.

**Career Bridge Programs**– Career bridges are intensive programs for students who test just below the GED or secondary level, designed to achieve three goals: pass the GED test (if needed); qualify for entry-level jobs in several high-growth career sectors; and prepare for CCC College to Careers programs offering certificates and degrees that can lead to well-paying jobs. Bridge students receive career development and transition services in addition to classroom instruction. Healthcare bridges are offered through all six colleges with Adult Education programs; additionally, Daley College has a Manufacturing bridge, Olive-Harvey College has a Transportation, Distribution, and Logistics bridge, and Kennedy-King College has a Culinary Arts and Hospitality bridge. Other bridges such as an Accounting/Business bridge will be launched in the future.

# ADULT EDUCATION

## English As A Second Language (ESL)

The English as a Second Language courses teach English language and civics skills to non-native English language learners. Courses are offered for students at all skill levels, from those who do not speak or understand any English to those who are more advanced, and include speaking, listening, reading, writing, vocabulary development, grammar and civics. Transition level ESL courses are available for students who are preparing to enter college-level studies. Citizenship courses are available at some colleges for students preparing to pass the US Citizenship and Immigration Services naturalization exam.

## Alternative High School – Middle Colleges

Students between the ages of 16-21 who have dropped out of school but are interested in earning a high school diploma may take advantage of the Middle Colleges. Students may enroll at Olive-Harvey Middle College, Truman Middle College, or one of the alternative high schools funded through this program.

Alternative high schools offer academic instruction and support in a small, non-traditional school setting. Support services vary by program and include: mentoring, counseling, online education, credit retrieval programs, teen parent services, career preparation and after-school and arts classes. In the Middle Colleges, dual enrollment in the City Colleges' credit programs is also offered.

For more information about these programs contact the middle colleges or the programs listed directly to the right: Olive-Harvey Middle College 10001 South Woodlawn Avenue (773) 291-6518

> Truman Middle College 1145 W. Wilson Avenue (773) 907-4840

Academy of Scholastic Achievement 4651 West Madison Street (773) 921-1315

Aspira, Inc. of Illinois - Antonia Pantoja H.S. 3121 N. Pulaski Road (773) 252-0970

Association House of Chicago – El Cuarto Año 1116 North Kedzie Avenue (773) 305-9400

> Austin Career Education Center 5352 West Chicago Avenue (773) 626-6988

> Community Christian Academy 1231 South Pulaski Road (773) 762-2272

> > Innovations High School 17 N. State Street (312) 999-9360

Lakeview Academy 716 West Addison Street (773) 281-3065

Prologue, Inc. 1135 North Cleaver Street (773) 935-9925

Sullivan House 8164 South Chicago Avenue (773) 978-8680

## **Department Prefix Codes**

DEPARTMENT PREFIX CODE	TITLE	ICCB NUMERIC CODE
HEALTH	Health	0001
HOSPTLY	Hospitality	0003
CMMEDIA	Communication Media	0004
ARCHITC	Architecture	0005
COOP EX	Cooperative Work Experience	0008
VIS COM	Visual Communications	0009
ART	Art	0010
MEDIACM	Media Communications	0011
DIET TC	Dietetic Technician	0012
CE013	CE013	0013
CE014	CE014	0014
CE015	CE015	0015
SURG TC	Surgical Technology	0016
REN TC	Renal Technology/Nephrology	0018
CLN LAB	Clinical Laboratory Technology	0019
DIAGSON	Diagnostic Medical Sonography	0020
RADIOGR	Radiography	0021
BIOLOGY	Biology	0023
MCROBIO	Micro Biology	0023
BOTANY	Botany	0024
ENVR ST	Environmental Studies	0025
ENVR 31 ENVR TC		
	Environmental Technology	0027
PHARM	Pharmacology	0028
ZOOLOGY	Zoology	0029
BUSINES	Business	0030
CIS	Computer Information Systems	0032
ELECTRN	Electronics	0033
ENGR	Engineering	0034
ENGLISH	English	0035
LIT	Literature	0036
READING	Reading	0037
FOODSRV	Food Service Administration	0038
LIS	Library and Information Science	0039
HUM	Humanities	0041
FIN ART	Fine Arts	0042
PHIL	Philosophy	0043
MATH	Mathematics	0045
POLISH	Polish	0046
CAD TEC	CAD Technology	0049
LIB TECH	Library Technology	0050
FRENCH	French	0051
ITALIAN	Italian	0052
JAPANES	Japanese	0054
SPANISH	Spanish	0057
MUSIC	Music	0060
RESP TC	Respiratory Therapy	0061
PHAR TC	Pharmacy Technology	0062
NURSING	Nursing	0063
PHYS ED	Physical Education	0065
FOODMGT	Food Management	0066
PUB SRV	Public Service	0069
OCEAN	Oceanography	0070
ASTROMY	Astronomy	0071
CHEM	Chemistry	0073
GEOLOGY	Geology	0075

**Department Prefix Codes** 

DEPARTMENT PREFIX CODE	TITLE	ICCB NUMERIC CODE
PHY SCI	Physical Science	0076
PHYSICS	Physics	0077
CRM JUS	Criminal Justice	0080
ANTHRO	Anthropology	0081
ECON	Economics	0082
EDUC	Education	0083
GEOG	Geography	0084
HISTORY	History	0085
POL SCI	Political Science	0086
PSYCH	Psychology	0087
SOC SCI	Social Science	0088
SOC	Sociology	0089
CHLD DV	Child Development	0090
SOC SER	Social Service	0091
AIR CON		0094
SPEECH	Air Conditioning	0094
HORTIC	Speech	0095
	Horticulture	
	Theater Art	0099
DENTHYG	Dental Hygiene	0100
INTDSP	Inter-Disciplinary Studies	0104
AUTOTEC	Automotive Technology	0105
PHLEB	Phlebotomy	0113
FIRE TC	Fire Science Technology	0116
AFRO AM	African-American Studies	0117
MENHLTH	Mental Health	0118
EMT	Emergency Medical Technician	0120
HLT TEC	Health Information Technology	0121
OTA	Occupational Therapy Assistant	0122
HLTH SCI	Health Science	0124
MOR SCI	Mortuary Science	0128
PHY AST	Physician's Assistant	0129
PT KAPPA	Phi Theta Kappa	0131
LING	Linguistics	0132
RELIGN	Comparative Religion	0133
PS REHB	Psychiatric Rehabilitation	0134
ESLWRIT	ESL Writing	0135
ESLINTG	ESL Integrated	0136
ESLREAD	ESL Reading	0137
DMD	Digital Multimedia	0138
INTCOMM	Integrated Communication	0139
CHINESE	Chinese	0141
LATIN	Latin	0142
ENTRE	Entrepreneurship	0143
ARABIC	Arabic	0144
HIM	Health Information Management	0145
HEAPRO	Health Professions	0146
ESSS	Exercise Science and Sports Studies	0140
DENTAL	Dental Assisting	0147
COMPSFI	Computer Security and Forensic Investigation	0162
COSMET	Cosmetology	0163
NET TEC	Networking Technologies	0165
OPH TC	Ophthalmic Technology	0167
HDFS	Human Development and Family Studies	0168
ABE GED BR175	ABE GED Bridge	0188 0170 0175

## **Department Prefix Codes**

DEPARTMENT PREFIX CODE	TITLE	ICCB NUMERIC CODE
VC175	Vocational 175	0175
CTX175	Contextual	0175
ESL	ESL	0180
ESLSPCH	ESL Speech	0195
330BKPS	Baking and Pastry	0330
330BSCM	Business and Commercial TechTC1	0330
330FPS	French Pastry School-Culinary	0330
330CUL	Culinary	0330
HMGT	Hospitality Management	0330
330TECH	Technology	0330
330TRNS	Logistic/Transportation/Distribution	0330
332ENGR	Engineering and Industrial TC1	0332
432ENGR	Engineering and Industrial TC6	0332
332TECH	Technology	0332
334HLTH	Health Technology	0334
340MFGT	Manufacturing	0340
340PRTE	Process Technology	0340
430BSCM	Business and Commercial Tech TC6	0430
432CMGT	Construction Management	0432
432CNMT	Construction Materials Technician	0432
432ELEV	Elevator	0432
432IBEW	IBEW	0432
432INSP	Inspector	0432
432PDT	Painting and Decorating	0432
434HLTH	Health Technology TC6	0434
CE HLTH	CE Health	0500
CE BSMT	CE Business Management	0502
CE TRDE	CE Trade/Industrial/Trans	0504
CE HECN	CE Home Economics	0506
FS READ	Foundational Studies Reading	0810
FS WRIT	Foundational Studies Writing	0820
FS MATH	Foundational Studies Mathematics	0830
FS ESL	Foundational Studies ESL	0840

**Note:** Alpha codes preceded by a 300 or 400 level number can be found by the alpha code, e.g., 330CUL, see Culinary, or 432CMGT, see Construction Management.

**General Education Courses** 



**ARC** = Allowed Repeatable Course may be repeated for credit. The number of times it is repeatable is designated in the course description. **HD** = Course fulfills the Human Diversity requirement in degree programs with Human Diversity Requirements. **GE** = Course is approved as a general education course.

IAI/GE = Illinois Articulation Agreement General Education: Under the Illinois Articulation

Initiative the course is

approved as a transferable

general education course.

IAI/Major = Illinois Articulation Agreement Major: Under the Illinois Articulation Initiative the course is approved to be a transferable major course. College Icons: Indicate where the course is approved to be offered. Refer to the course schedule for course availability.

## GENERAL EDUCATION

## **AFRICAN-AMERICAN STUDIES**

#### **AFRICAN-AMERICAN STUDIES 101**

#### Introduction to African-American Studies

Survey of African-American Studies from an interdisciplinary perspective; teamtaught course utilizes expertise of African-American Studies staff, and embraces five basic categories of the African-American Studies program. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: KK MX OH

## ANTHROPOLOGY

## **ANTHROPOLOGY 201**

**Introduction to Biological and Cultural Evolutions of Humans** Survey and analysis of the fundamentals of prehistoric archaeology, fossil primates and primate evolution, primate behavior, human genetics, and the variations of human populations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX TR WR | HD

## **ANTHROPOLOGY 202**

## **Cultural Anthropology**

Comparative study of human societies and cultures of the world; cross-cultural investigation of social organization and political, economic, religious, and family systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

IAI/GE: KK MX OH TR HW WR | HD

#### ANTHROPOLOGY 205 Applied Anthropology

This course explores the application of anthropological concepts, perspectives, techniques, and information to understanding and dealing with contemporary issues. Discusses the relevance of anthropology to such practical concerns as healthcare, business, and community development, and illustrates the versatility of its uses in numerous career fields. Writing assignments, as appropriate to the

discipline, are part of the course.

Prerequisite(s): Eligibility for English 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## ANTHROPOLOGY 210

## North American Archaeology

Prehistoric cultural evolution in North America, including the first arrival of people, distribution, beginnings of settled life and formation of political-religious states; prehistory of Eastern and Western United States and Eastern, Central, and Southern Mexico until arrival of Europeans. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## ART

#### ART 103 Art Appreciation

Appreciation of art works taken from all cultures and periods. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA MX OH TR HW WR | HD

## ASTRONOMY

## ASTRONOMY 201

## Descriptive Astronomy

Descriptive survey of major astronomical facts, concepts, and relationships, starting with the solar system and extending to stars, galaxies, and cosmogonies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.





## BIOLOGY

#### **BIOLOGY 107** Nutrition-Consumer Education

Science of food as it relates to health, including food composition and utilization, food preparation and preservation, nutrition, special diets, fad foods, and foods of the future; social and political aspects of food in the world's future. Writing assignments, as appropriate to the discipline, are part of the course.



**General Education Courses** 

## **BIOLOGY 109**

#### **Human Genetics and Evolution**

Basis of inheritance; analysis of human pedigrees; sex-linkage; physical and behavioral aspects of human evolution. Writing assignments, as appropriate to the discipline, are part of the course.

## **3 LECTURE HOURS. 3 CREDIT HOURS.**



IAI/GE: HW

#### **BIOLOGY 113** The Biology of Women

A comprehensive look at the human female throughout her entire life span. Deals with biological sex differentiation, fetal development and reproductive anatomy. Explains events of a woman's reproductive life from menarche to menopause, sexuality, birth control, infertility, and pregnancy. Discusses sexually transmitted diseases, gynecological problems, breast cancer, controversial treatments and healthcare. Examines sociological and cultural health factors that influence a womans nutrition, physical activity, use of cosmetics, and use and abuse of drugs. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



## BIOLOGY 114

## **General Education Biology**

A laboratory course emphasizing scientific inquiry through selected concepts of biology, such as organization, function heredity, evolution, and ecology. Biological issues with personal and social implications will be introduced to enable students to make informed decisions. This course is equivalent to the Illinois Articulation Initiatives General Education generic course numbered L1900L. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

## 

IAI/GE: DA KK MX OH TR HW WR

## BIOLOGY 115

## Human Biology

Examines practical aspects of selected concepts in biology and their application to technology. Concepts may include heredity, growth, development, health, and ecology. Human systems may be studied as they relate to the major topics. Emphasis will be placed on the relationship of the issues to the individual and society. This course is equivalent to the Illinois Articulation Initiative's General Education generic course numbered L1904L. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## **BIOLOGY 116**

#### Anatomy and Physiology

Laboratory studies in gross and microscopic mammalian anatomy. Lectures correlate human anatomy and physiology. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



IAI/GE: MX

## BIOLOGY 119

## **Environmental Biology**

This general education laboratory course is geared for both environmental science majors as well as non-science majors. The environment and human impacts on natural resources, pollution, and ecosystems are emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



BIOLOGY 121

## Biology I

Cellular and Molecular Biology. Introduction to biochemistry, molecular genetics, cell structure, function, and processes. Laboratory required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



IAI/MAJOR: DA KK MX OH TR HW WR

## **BIOLOGY 122**

## Biology II

Continuation of Biology 121. Organismal biology, ecology, and evolution. An introduction to structure and function of major groups of microorganisms, fungi, animals, and plants. Emphasis on evolutionary relationships and ecological principles. Laboratory required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 121 or consent of Department Chairperson.

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.

## 

IAI/MAJOR: DA KK MX OH TR HW WR

## BOTANY

## BOTANY 201

## General Botany I

General biological principles applied to anatomy, physiology, reproduction, and heredity of seed plants. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or Consent of Department Chairperson.





IAI/GE: DA TR WR

## CHEMISTRY

#### CHEMISTRY 121 Basic Chemistry I

Principles of general inorganic chemistry, including properties of matter, dimensional analysis, fundamentals of stoichiometry, interpretation of the periodic table, nomenclature, and introduction to solution chemistry and commonly used concentration units. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and eligibility for Mathematics 118 or higher, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



**INFORMATION SUBJECT TO CHANGE** 

## **CHEMISTRY 201**

## General Chemistry I

Topics include the periodic table of the elements, atomic structure, basic concepts of quantum theory, bonding, stoichiometry of compounds and reactions, thermochemistry, the gaseous state, basic concepts of the liquid and solid states, solutions, acids, and bases. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 140 or higher and Grade of C or better in Chemistry 121, or one year of high school chemistry, or consent of Department Chairperson.

4 LECTURE HOURS AND 4 LAB HOURS. 5 CREDIT HOURS.

IAI/GE: DA KK MX OH TR HW WR IAI/MAJOR: KK MX OH TR HW WR

## CHINESE

#### **CHINESE 104**

#### **Chinese IV**

This course provides intensive work in the use of Mandarin Chinese through listening, speaking, reading, and writing and through continued enhancement of the cultural awareness intrinsic to these four skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chinese 103 or consent of Department Chairperson. 4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: MX | HD

## **COMMUNICATION MEDIA**

## **COMMUNICATION MEDIA 110**

## **History of Photography**

The historical development of photography as an art from 1839 to the present, including critical analysis of photographs and aesthetic movements in photography. Examines photographs for their aesthetic and humanistic values, emphasizing photographs as expressions of ideas and beliefs of photographers within their cultural and social contexts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

WR

## IAI/GE: WR

## **COMMUNICATION MEDIA 163**

## **Film Rhetoric**

Introductory film making skills, both camera work and editing; film viewing designed to cultivate students' understanding of how films affect them; includes terminology, effects of film on people, how these effects are achieved, and concepts of criticism and advertising. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## ECONOMICS

## **ECONOMICS 133**

## **Consumer Economics**

Principles of intelligent buying, investments, shelter, insurance, and basic commodities; development of consumer cooperative movement, advertising, fraud, monopoly, and competition, and role of government in promoting consumer welfare. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ECONOMICS 201 Principles of Economics I

Covers macro or income analysis; includes money, income determination, public finance, and economic development. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### IAI/GE: DA KK MX OH TR HW WR

## ECONOMICS 202

## Principles of Economics II

Covers micro or price analysis; includes the markets, production function, income distribution, and international trade. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## ECONOMICS 203

Current Economic Problems

Representative contemporary economic problems and possible solutions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Economics 201 or Social Science 102, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## ECONOMICS 204

#### **Money and Banking**

Economic history and operation of US monetary and banking systems; business cycles, international exchange, Federal Reserve System, and use of national fiscal policies as instruments of economic control. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Economics 201 and 202, or consent of Department Chairperson.



**General Education Courses** 

## **ENGLISH**

## **ENGLISH 101**

## Composition

Development of critical and analytical skills in writing and reading of expository prose. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

## **3 LECTURE HOURS. 3 CREDIT HOURS.**

IAI/GE: DA KK MX OH TR HW WR

## ENGLISH 102

## Composition

Continuation of English 101. Introduces methods of research and writing of investigative papers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

## 

IAI/GE: DA KK MX OH TR HW WR

## **ENVIRONMENTAL TECHNOLOGY**

#### **ENVIRONMENTAL TECHNOLOGY 107 Environmental Geology**

This course will examine human interactions with geologic processes and hazards. including earthquakes, volcanoes, landslides, subsidence, hydrology, and flooding; occurrence and availability of geologic resources, such as energy, water, and minerals; principals of land-use planning, pollution, waste disposal, environmental impact, health, and law. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: WR

## **FINE ARTS**

## **FINE ARTS 103**

## Theater Arts

A cross-disciplinary approach to the performing arts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **FINE ARTS 104** The World of the Cinema

Study of various types of films; covers historical development, production methods, technique of films and critical evaluation. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **FINE ARTS 105**

## History of Painting, Sculpture and Architecture

Survey of art from pre-historic to contemporary. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA HW

#### **FINE ARTS 107**

#### History of Architecture, Painting and Sculpture I

Survey of art from pre-history through the 17th Century. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



IAI/GE: DA KK MX TR HW WR

## **FINE ARTS 108**

History of Architecture, Painting and Sculpture II Survey of art from the 18th Century to the present. Writing assignments, as

appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



IAI/GE: DA KK MX OH TR HW WR

## **FINE ARTS 109**

**History of Cinema** 

An international survey of the history of cinema, from the silent era to contemporary filmmaking, emphasizing a study of various film genres from around the world and innovations in film production that have had significant influence on film as an art form. Full-length films and film clips will be screened in class. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



IAI/GE: HW

## **FINE ARTS 110**

#### **Opera and the Humanities**

Study of opera as a medium that communicates the philosophic, aesthetic and psychological perspectives of composers and their eras includes selected operas which parallel those offered in the community and present similar communication experiences. Written material, radio broadcasts of operas, opera commentaries and opera performances will be utilized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## COURSE DESCRIPTIONS **General Education Courses**

## FRENCH

## **FRENCH 104**

## **Fourth Course French**

Review of language structure and interpretation of readings, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or grade of C or better in French 103, and Consent of Department Chairperson.

**4 LECTURE HOURS. 4 CREDIT HOURS.** 

## 

IAI/GE: TR HW WR | HD

## FRENCH 206

#### **Intensive French Oral Practice**

Practice in spoken language, fluency, and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or grade of C or better in French 104, and Consent of Department Chairperson.

**4 LECTURE HOURS. 4 CREDIT HOURS.** 



## FRENCH 210

#### **Modern French Civilization and Culture**

Recent social, cultural, and historical trends, conducted in French and English. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **FRENCH 213**

## Introduction to Modern French Literature

Selections from contemporary writings, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or grade of C or better in French 104, and Consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: HW WR

## FRENCH 214

## **Readings in French Literature**

Works from selected historical periods, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or grade of C or better in French 104, and Consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## GEOGRAPHY

## **GEOGRAPHY 101**

## World Geography

Economic, political, and cultural geography of the modern world; includes the people, raw materials, industrial resources, and trade connections of various parts of the earth. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



IAI/GE: DA KK MX TR HW WR | HD

## **GEOGRAPHY 102**

## **Economic Geography**

Contemporary view of the economic interdependence of the nations of the world with emphasis on role of the United States, the dynamic changing future of geography, and its influence on world conditions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



IAI/GE: KK HW | HD

## **GEOGRAPHY 115**

## **Geography of Metro Chicago**

Examination of physical characteristics of six-county metropolitan area, including topography, climate, and waterways; functional land use patterns, including economic modes, population concentrations, transportation patterns, and historic development. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 

#### **GEOGRAPHY 201 Physical Geography**

Physical environment of humans, their atmosphere, landforms, waters, and other natural resources; emphasis on interrelationships of these areas and interaction of humans with their surroundings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA HW WR

## GEOLOGY

## **GEOLOGY 201**

## **Physical Geology**

Basic earth processes: weathering, erosion, deposition, mountain building, metamorphism, volcanism, and plate tectonics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.** 



**General Education Courses** 

## HISTORY

## **HISTORY 111**

#### **History of American People to 1865**

Exploration of the new world and its colonization; study of colonial life with emphasis on cultural heritage and the American Revolution; emergence of American nation traced through major trends and events in economic, political, cultural, social, and intellectual affairs; includes past and present American cultural patterns. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK KK OH TR HW WR

#### **HISTORY 112**

#### **History of American People from 1865**

American history from the close of the Civil War to the present; political and economic developments, and social, intellectual, and cultural changes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



IAI/GE: DA KK MX OH TR HW WR

## **HISTORY 113**

## **United States Labor History**

Labor movement development in the United States; worker issues such as wages, hours, and working conditions are analyzed within their historical context; labor legislation, collective bargaining, social insurance, government intervention and prospects for organized labor are examined in their historical setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## 

#### **HISTORY 114**

#### The Afro-American in American History

Explores role of the Afro-American in American culture and the historical traditions which give rise to current dilemmas confronting the American community. Traces history of people of African heritage from the background of African culture and slave trade as they became a part of American life. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HISTORY 115**

### Afro-American History Since 1865

Reconstruction period after the Civil War; black politics in the new South; rise of Jim Crow sentiment; alliance of northern industry and southern Bourbonism; early northward migrations and urban culture; growth of civil rights organizations; W.E.B. DuBois and Booker T. Washington; blacks in World Wars I and II; post-war developments. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **HISTORY 117**

## History of Chicago Metropolitan Area

Evolution of Chicago metropolitan area from frontier outpost to modern metropolis; economic, social, political, and cultural changes; analysis of institutions; discussion of current problems requiring solution in context of their historical background. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## HISTORY 118

## Women in American History

Introduction to history of women in America; women's changing status in society; effect of major events and forces on women's lives; women's role in reform; and discussion of recent problems in light of past developments. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **HISTORY 141**

## History of World Civilization to 1500

Definition and flowering of the classical civilizations of Eurasia, Africa, and the Americas. Emphasizes environment, cultural diffusion, and technology as shaping forces in world history; empires and trade links; the major religious systems to 1500 C.E. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR | HD

## HISTORY 142

#### **History of World Civilization from 1500**

Effects of the military, scientific, industrial, and democratic revolutions on the balance of civilization after 1500 C.E. Topics include: the gunpower empires; the "Columbian exchange"; colonialism and the price revolution; capitalism and liberalism in global perspective; nationalism and dictatorship; the century of total war; the shifting world balance in the new millennium. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



IAI/GE: DA KK MX OH TR HW WR | HD

## HISTORY 210

## War and Peace in the Nuclear Age

An overview of the origins and evolution of nuclear weapons as well as the political, strategic, technological, and ideological problems and issues that have stemmed from their development. Thirteen-part television series. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



**General Education Courses** 

## **HISTORY 211**

#### **Problems in History**

Methods of historical research; specific subject matter depends on faculty member in charge. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **HISTORY 212**

## **History and Culture of China**

Study of Chinese history from Asian dynasties to the present. Political, economic, and cultural structure of traditional Chinese civilization, foreign relations, invasions, and consequences including the rise of the Communist Party and the emergence of modern Communist China. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## HISTORY 215

#### **History of Latin America**

Political and constitutional history of principal Latin American nations; European, American and Indian backgrounds, movements for independence, and social and economic movements pertinent to their present relationships with the United States. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

## 3 LECTURE HOURS. 3 CREDIT HOURS.

## 

IAI/GE: DA KK OH TR HW WR | HD

#### **HISTORY 225**

#### **Modern Middle East History**

This course examines the history of the Modern Middle East since World War I by looking at the challenges posed by imperialism and the rise of nationalism in the area. The region studied encompasses the Arab world, Israel, Turkey, and Iran.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: HW WR | HD

## **HISTORY 230**

#### **Ancient History**

History of ancient Mediterranean civilization from its origins to the fall of the Roman Empire; background of Egyptian, Assyrian, and Babylonian civilizations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### HISTORY 232

#### Modern European History 1500-1830

Medieval backgrounds, the Reformation and religious struggles, the development of nation-state, commercial revolution, colonization, and European expansion. Includes the rise of Prussia and Russia and the French Revolution. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **HISTORY 233**

## Modern European History Since 1830

Recent European history, includes 19th Century background, emphasis on the period following the Versailles Treaty of 1919. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HISTORY 243**

#### The Far East in the Modern World

Historical development of China, India, and Japan. Evolution of Oriental culture, economy, society, and government; the relation of America and the Far East; and the impact of Western ideas and institutions on the region. Survey of Philippines, Indo-China, Indonesia, and Korea. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: KK WR | HD

#### **HISTORY 247**

#### **African History to Colonial Period**

Historical background of Africa south of the Sahara; pre-colonial and cultural development including tribal histories, impact of colonialism, and development of African nationalism. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA MX OH TR HW WR | HD

## HISTORY 248

#### African History: Modern Period

Growth of colonial government; the economic role of colonies; early opposition movements against European imperialism; the psychology of the colonizer and colonized; civil wars and independence. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: KK MX HW | HD

## **HISTORY 250**

## **Topics in American History**

Selected topics in history for students interested in further developing and understanding specific periods, movements and leaders; emphasis on the social, political, economic, intellectual and philosophical events and implications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.





**General Education Courses** 

## **HISTORY 252**

## **History of Science**

Basic scientific principles, historic origins, and the evolution of scientific thought in the sciences from ancient civilization to present, with a comparative component between Western and non-Western sciences. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **HUMANITIES**

## HUMANITIES 105

#### The New World of Mass Media

Analysis and evaluation of the strengths, limitations, impact, and social media biases of both print and electronic mass media. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## HUMANITIES 107

#### Pop Culture: Mirror of American Life

Interdisciplinary investigation of relationships between American life and popular culture; includes defining popular culture and high culture; role of formulating popular culture in films, role of advertising in popular culture, stereotypes of the sexes and ethnic groups, role of sports in American life, popular music and its audience, and television. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### **HUMANITIES 123**

#### Introduction to Arts and Ideas

Interdisciplinary introduction to the arts and ideas through the study of masterpieces past and present. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

IAI/GE: DA HW WR

## HUMANITIES 141

#### Afro-American Arts

Examination of African and Afro-American music, literature, art, and philosophy, stressing African sources of Afro-American heritage and their contribution to Western culture. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **HUMANITIES 143**

#### Introduction to Latin American/Latino Studies

This course presents an interdisciplinary study of Latin American cultures, including Latino cultures in the U.S., from literary, artistic and philosophical perspectives. It explores various links between Latino cultures in the U.S. and other Latin American countries through the study of historical and artistic periods, major movements, and integrated theories. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: HW | HD

## HUMANITIES 145

#### Introduction to Diversity/Ethnic Studies

This course presents an introduction to the broad field of diversity/ethnicity through the interdisciplinary study of art, music, literature, history, and philosophy. This course will emphasize the content, style, and historical context of the various diversity/ethnicity-related artifacts, particularly those created by and featuring depictions of diverse/ethnic groups. The course will feature African-American, Latino/Latin-American, Native American, and European American artists, artistic expressions, and portrayals of these groups in the arts, by themselves and "outsiders", and the impact of these portrayals on the groups and society at large. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: HW | HD

#### **HUMANITIES 146**

## Gay, Lesbian, Bisexual and Transgendered

The interdisciplinary interpretation of historic and contemporary creative works (art, drams, film, literature, and music) with Gay, Lesbian, Bisexual, and Transgendered themes, primarily by multicultural GLBT authors and artists of the Americas. Analysis of GLBT culture from the perspective of Queer theory. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: TR | HD

#### HUMANITIES 201

#### **General Course I Humanities**

Introduction to the interdisciplinary study of arts and ideas, with emphasis on principles of analysis and interpretation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### IAI/GE: DA KK MX OH TR HW WR

## HUMANITIES 202

## **General Course II Humanities**

Continuing the interdisciplinary study of arts and ideas; with emphasis on principles of analysis and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

**General Education Courses** 

## **HUMANITIES 203**

#### Arts of Contemporary America

Analysis and evaluation of major art forms of today–film, television, poster art, journalism, poetry, fiction, painting, and music. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: HW

## **HUMANITIES 205**

## World Literature I

Masterpieces of world literature including principal works from selected literary periods and traditions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR

#### **HUMANITIES 206**

## World Literature II Existentialism

Introduction to Existentialist philosophers, dramatists, and novelists. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **HUMANITIES 207**

#### The Great Books

For students who seek enrichment through acquaintance with formulation and ideas of Western civilization. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX HW WR

## **HUMANITIES 208**

#### **Women in Creative: Performing Arts**

Examination of the changing views of woman's nature, her relationship to man and to society as found in the creative and performing arts, and philosophical works of a specific culture or cultures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HUMANITIES 210**

## **Comparative Mythology**

A comparative introduction to mythology throughout the world. The emphasis is on the nature of mythology through the study of mythological themes in folklore, myth, and legendary narratives and the visual representation of those themes. The course includes non-Western and multicultural components. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: KK MX TR HW WR

#### **HUMANITIES 212**

#### **Non-Western Humanities**

An interdisciplinary survey of significant intellectual and artistic achievements of non-Western cultures through selected works of literature, philosophy, visual art, music, and other performing arts. This course transfers Illinois Articulation Initiative general education generic course numbered HF94N: Non-Western Humanities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: KK MX TR HW WR | HD

#### **HUMANITIES 213**

## Hispano-American Arts and Literature I

This course is an interdisciplinary survey of significant intellectual and artistic achievements of Hispano-American cultures through selected works of literature, philosophy, visual arts, music, and other performing arts. Includes reading and analysis of representative masterpieces from a variety of nationalities and epochs focusing on Western literature. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

WR

## **HUMANITIES 214**

#### **Hispano-American Arts and Literature II**

This course continues the studies of Hispano-American Arts and Literature I, an interdisciplinary survey of significant intellectual and artistic achievements of Hispano-American cultures through selected works of literature, philosophy, visual arts, music, and other performing arts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



### **HUMANITIES 215**

#### The Art and Philosophy of the African Continent

African culture of the past and present including art, music, literature, history, language, political science, and economics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



**General Education Courses** 

## ITALIAN

## **ITALIAN 104**

## **Fourth Course Italian**

Review of language structure and interpretation of readings, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Italian 103, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### IAI/GE: HW | HD

#### **ITALIAN 206**

#### **Intensive Italian Oral Practice**

Practice in spoken language, fluency and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Italian 104, or consent of Department Chairperson. 4 LECTURE HOURS. 4 CREDIT HOURS.



#### HD

## ITALIAN 213

#### Introduction to Modern Italian Literature

Selections from contemporary writings, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or Italian 104.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



HD

#### **ITALIAN 214**

#### **Readings in Italian Literature**

Works from selected historical periods, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or Italian 104. 3 LECTURE HOURS. 3 CREDIT HOURS.



HD

## JAPANESE

#### **JAPANESE 104**

#### Fourth Course Japanese

Review of language structure and interpretation of readings, conducted in Japanese. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Japanese 103, or consent of Department Chairperson.

#### 4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: HW | HD

## LITERATURE

## LITERATURE 110

## Introduction to Literature

Representative poetry and prose. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## IAI/GE: DA KK MX OH TR HW WR

## **LITERATURE 111**

Poetry

Reading of representative poems from various periods for analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR

## LITERATURE 112

## Drama

Reading of representative plays from various periods for analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR

#### LITERATURE 113 Fiction

Reading of representative novels and short stories from various periods for analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

#### LITERATURE 114 Ideas in Prose

Introduction to significant prose writing in major areas of thought. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA MX

## **LITERATURE 115**

#### **Great Books Seminar/Topic Literature**

This course focuses on the Great Books Foundations and Great Books texts and examines in-depth the global themes in the literature for enrichment, stimulation, pleasure, and greater self-knowledge. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. **ARC: 4 times.** 

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



**General Education Courses** 

## **LITERATURE 116**

## American Literature from Colonial Days to Civil War

Early American social and political documents, novels, short stories, and poems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

IAI/GE: KK MX HW WR

## **LITERATURE 117**

#### American Literature from the Civil War to the 20th Century

American prose and poetry from 1865 to 1914. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

IAI/GE: DA KK TR HW WR

#### LITERATURE 118 English Literature from Its Beginnings to the Age of Johnson

Important writers and representative literary forms. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: HW WR

## **LITERATURE 120**

## **Contemporary British and American Literature**

Major British and American writers of fiction, poetry, and drama of the 20th Century. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **LITERATURE 121**

#### **Contemporary African-American Literature**

Survey of major African-American writers from the period of Harlem Renaissance to present day. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## IAI/GE: KK MX OH HW WR | HD

## LITERATURE 122

## Perspectives in Black Literature

Sequence and scope of writing development by blacks in America; analysis and interpreting of major works of prose, poetry, and drama. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: KK MX | HD

#### LITERATURE 123

## Literature of the U.S. from the Civil War to the Present

Development of the literature of the United States from the Civil War to the present through the analysis of representative texts.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: OH

#### LITERATURE 124 Experimental Literature

New directions in writing; experiments in poetry, prose, drama, and exploratory writing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## LITERATURE 125

**Psychology in Black Literature** Analysis of books by African-American writers from a psychological point of

view; begins with autobiography of Frederick Douglass and concludes with black experiences by contemporary writers Cleaver and Jones. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

LECTURE HOURS. 3 CREDIT HOU



HD

## LITERATURE 126

## Contemporary American Literature

Major American writers of fiction, poetry, drama, and essays of the 20th Century. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## IAI/GE: MX HW WR

## LITERATURE 127

**Contemporary British Literature** 

Major British, Irish, and Scottish writers of fiction, poetry, drama, and essays of the 20th Century. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.





## **General Education Courses**

## **LITERATURE 128**

## Latin American Literature

This course spans the centuries and the Western Hemisphere. It includes the pre-Columbian Mayan Indian authors of Popol Vuh and the world-renowned contemporary practitioners of magic realism. The course includes authors from Mexico, the Caribbean, Central America, and South America. Close attention will be paid to the historical and cultural context of the works. Readings, lectures, and course work will be in English. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



IAI/GE: MX TR HW | HD

## **LITERATURE 129**

#### U.S. Latino(a) Literature

This course explores the trends and movements of various periods of U.S. Latino(a) literature in relation to U.S. Latino(a) social and cultural history. As part of the literature of the United States, these works are distinct from, although sometimes influenced by, Latin American literature, which is written in Spanish or Portuguese by authors native to Latin American and Caribbean countries. The U.S. Latino(a) texts in this course–poetry, fiction, drama, memoir, and chronicle–depict various issues and themes pertinent to this ethnic segment of the United States, including Latino(a) writers' stylistic and thematic contributions to American mainstream literature. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: HW WR | HD

## **LITERATURE 130**

#### **Children's Literature**

Survey of children's books, stories, magazines, and related audio-visual material; criteria evaluated for building literature program within the classroom. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## LITERATURE 131

## Survey of Afro-American Poetry

Historical and critical survey of Afro-American poetry; minor emphasis on Harlem Renaissance and major emphasis on contemporary Afro-American arts movements. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



LITERATURE 133 African-American Fiction

Aesthetic values that determine quality of fiction written by African-Americans who profess a national consciousness; short fiction from anthologies, environment, style, and social implications emphasized; critical and creative writings required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **LITERATURE 137**

#### The Black Woman in Black Fiction

Exploration of images of the African-American woman in novels and short stories through lectures, discussion, and optional out-of-class group sessions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## \_\_\_\_\_

#### LITERATURE 150 Women's Literature

Ideas and philosophy of women writers as represented in their works; problems of women and works portraying women characters in modern British and American works. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.* 

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR | HD

## LITERATURE 153 Gay and Lesbian Literature

Guided each year by a central sub-theme of the larger Queer Culture, this course focuses on literary words by gay, lesbian, bisexual, and transgendered individuals. Students will learn and combine principles of argumentation, making clear distinctions between emotion and rationality in their responses (in both oral and written form) to course content. As historical and cultural content for these readings are provided, the course will examine the authors' theories (for instance, on topics related to class, race, and gender) and the extent of their relevance in contemporary Queer Culture. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## LITERATURE 155

Literature and Film Analysis of literature in film; comparison of literary and film techniques, verbal and visual language, and film and modern literature. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.





**General Education Courses** 

## LITERATURE 156

## **Creative Non-Fiction**

A survey course of creative non-fiction in a variety of forms; personal narrative essays, true crime non-fiction novels, and first-person cultural criticism. This course introduces students to a genre of literature, to practical approaches to the determination of literary meaning, and to the concerns of literature in general. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: WR

## **LITERATURE 211**

#### Shakespeare

Critical reading and discussion of representative Shakespearean histories, tragedies, comedies, and sonnets. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

## 

IAI/GE: DA KK MX TR HW WR

#### LITERATURE 220 World Literature

Survey of masterpieces in world literature: principal works and writers, literary periods, and traditions with selections from ancient times through present day. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA

## **LITERATURE 221**

#### Topics in Literature: Romanticism in British and American Literature

A study of works that exhibit the trends in literature and thought in Britain and America in the 19th Century, and their Continental cross-currents. The course may emphasize particular authors, literary movements, or the development of a genre, or early examples of contemporary concerns. It may trace a problem, such as industrialization of the shift to urban life. Topics may change from semester to semester but the chronological parameter will remain the same and the relevance to Literature 220 will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Literature 220 or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS.



IAI/GE: DA

## LITERATURE 223

#### **Introduction to Literary Genres**

Introduction to basic literary genres and their characteristics. Includes development of critical judgment and skill in analysis of literary works. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 





#### Science Fiction: Psychology and Prophecy

A survey of major writers of science fiction. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## MATHEMATICS

## MATHEMATICS 118

## General Education Mathematics

Focuses on mathematical reasoning and solving real life problems, rather than on routine skills and appreciation. A maximum of four of the following topics is studied in depth: geometry, counting techniques and probability, graph theory, logic, game theory, linear programming, and statistics. The use of calculators and computers is strongly encouraged. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 118 or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## **MATHEMATICS 121**

## Mathematics for Elementary Teachers I

This course focuses on mathematical reasoning and problem-solving. Topics include operations with rational and irrational numbers, sets, functions, logic, numeration systems and number theory, and solution of linear equations in one variable. Applications are included throughout the course. Problem-solving with the use of calculators and computers is emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 99; or COMPASS placement test score range within Pre-algebra (17-99) and Algebra (43-99) and College Algebra (1-50); or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



## MATHEMATICS 122

## Mathematics for Elementary Teachers II

This course is a continuation of Mathematics 121. Topics include probability and statistics, lines, angles, polygons, Pythagorean Theorem, circles, solids, areas, volume, and measurements. Applications are included throughout the course. Problem-solving with the use of computes is emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 121 or consent of Department Chairperson. 4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

**General Education Courses** 

## **MATHEMATICS 125**

#### **Introductory Statistics**

Basic descriptive statistics including frequency distributions, mode, mean, and standard deviation. Permutations, combinations, probability rules, and Bayes Theorem. Binomial and normal distributions. Basic inferential statistics including sampling theory, confidence intervals for means and proportions, and test of hypotheses. Chi-square distribution. Introduction to correlation and regression. Includes at least one hour per week using computers in statistical application. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 99.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR IAI/MAJOR: DA KK MX OH TR HW WR

#### **MATHEMATICS 126**

**Algebra for Middle School Teachers** 

This course focuses on the concept of functions in college algebra. It is designed to meet the needs of middle school teachers in accordance to the National Council of Teachers of Mathematics Standards for Teaching Mathematics. Topics include basic definition of different functions and their properties. The following algebraic concepts will be explored: linear functions, systems of linear equations, quadratic functions, non-linear data, combinatorics, probability, exponential functions, log functions, square root functions, absolute value, and trigonometry as periodic functions. Problem-solving using calculators, CBLs, and computers is emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 121 and Mathematics 122.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### **MATHEMATICS 127**

### **Geometry/Trigonometry for Middle School Teachers**

This course focuses on the concepts of plane and solid geometry and trigonometry. It is designed to meet the needs of a middle school teacher in accordance with the National Council of Teachers of Mathematics Standard and the Professional Standards for Teaching Mathematics. Topics include basic definitions and properties of plane and solid figures, congruence, similarity, constructions, Pythagorean Theorem, measurements, transformations, the unit circle, and right triangle trigonometry. Problem-solving with the use of calculators and computers is emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



## **MATHEMATICS 141**

**Plane Trigonometry** Definition of trigonometric functions, as well as graphs of trigonometric functions

and their universes. Applications to triangles, law of sines and cosines, trigonometric identities, equations, vectors, and applications. Complex numbers in trigonometric form, and DeMoivres Theorem. Calculators will be used. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 140, placement test, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **MATHEMATICS 144** Finite Mathematics

Logic, sets, partitions, counting, probability rules and Bayes Theorem, vectors and matrices, and linear programming. Includes applications to behavioral sciences and to business and administration problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 140; COMPASS Placement test score range within Pre-algebra (17-99) and Algebra (43-99) and College Algebra (51-99) and Trigonometry (1-50); or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: DA KK MX TR HW WR

#### MATHEMATICS 146 Discrete Mathematics

Introduction to mathematical analysis of finite collections and mathematical foundations of sequential machines, digital logic circuits, data structures, and algorithms. Includes sets, counting, recursion, graph theory, nets, automata, and formal grammars and languages. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 140; COMPASS Placement test score range within Pre-algebra (17-99) and Algebra (43-99) and College Algebra (51-99) and Trigonometry (1-50); or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: DA HW WR IAI/MAJOR: DA TR HW WR

#### MATHEMATICS 204

## **Calculus For Business and Social Sciences**

For students of business and social science. Introduction to differential and integral calculus with applications pertinent to business and social science. The five-credit hour course will include functions of several variables, partial derivatives, maximum, minimum of functions of several variables and LaGrange multipliers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 140; COMPASS Placement test score range within Pre-algebra (17-99) and Algebra (43-99) and College Algebra (51-99) and Trigonometry (1-50); or consent of Department Chairperson.

4-5 LECTURE HOURS. 4-5 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

#### MATHEMATICS 207

#### **Calculus and Analytic Geometry I**

Equations of lines, circles and conic sections, limits, and continuity. Derivatives and their applications to curve sketching, maxima-minima, and related rate problems. The anti-derivative and definite integral, including change of variables and the fundamental theorem of calculus. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 140 and 141, or Mathematics 143, placement test, or consent of Department Chairperson.

**5 LECTURE HOURS. 5 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR IAI/MAJOR: DA MX OH TR WR

**General Education Courses** 

#### **MATHEMATICS 208**

## **Calculus and Analytic Geometry II**

Derivatives of trigonometric and inverse trigonometric functions, logarithmic and exponential functions. Techniques and applications of integration. Indeterminate forms and L-Hospitals rule. Improper integrals. Infinite series and power series. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 207 or consent of Department Chairperson.

5 LECTURE HOURS. 5 CREDIT HOURS.



IAI/MAJOR: DA MX OH TR WR

#### **MATHEMATICS 209**

#### **Calculus and Analytic Geometry III**

Curves in the plane and in 3-dimensional space. Polar coordinates and parametric equations. Vectors in 2-dimensional and 3-dimensional space. Derivatives of vector-valued functions. Partial derivatives. Double and triple integrals. Applications. Line integrals and Greens Theorem. Divergence and curl. Surface integrals. Gauss Theorem and Stokes Theorem. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 208 or consent of Department Chairperson. **5 LECTURE HOURS. 5 CREDIT HOURS.** 

## 

IAI/GE: DA KK OH TR HW WR IAI/MAJOR: DA MX OH TR WR

#### **MATHEMATICS 225**

Honors Mathematics Survey I

Survey in general mathematics for the liberal arts student; includes history, sets, number bases and logic, algebra of the real number system, an introduction to probability and statistics, calculators, and computers. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



## MUSIC

## **MUSIC 101**

#### **Fundamentals of Music Theory**

Introduction to music theory and application: rhythm, meter, scales, intervals, triads, and musical terminology; development of aural and keyboard skills. Writing assignments, as appropriate to the discipline, are part of the course. No credit toward graduation for music majors.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## MUSIC 121

## Introduction to Music

Elements, structure, listening, literature, and aesthetic perspective; concert attendance. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **MUSIC 124**

#### **Trends in Modern American Music**

Exploration of what has been happening in this century in American music; includes review of social conditions that have nourished these trends and discussion of folk, blues, jazz, country and western, rock, musical theater, and classical music. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## MUSIC 131

#### Chorus

This course trains students in vocal performance, familiarizes them with choral literature, and provides opportunities for public performances and musical performances for college functions. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated six credit hours will be counted towards graduation. **ARC: 4 times.** 

1 LECTURE HOUR AND 0.5-2 LAB HOURS. 1-2 CREDIT HOURS.



IAI: KK MX OH TR HW WR

## **MUSIC 183**

## World Music

A study of representative music of the non-Western world, with an emphasis on its function within the culture of which it is a part. Elements, structure, listening, aesthetic perspectives; concert attendance. Students need no prior formal training or education in music to take this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

#### (нw)

#### IAI/GE: HW | HD

## MUSIC 221

## **Music Literature and History**

Introduction to the standard concert repertory through intensive guided listening. Representative works by major composers are chosen to illustrate the principal styles, forms, and techniques of vocal and instrumental music. Assumes a fundamental knowledge and understanding of the elements of music. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: HW WR

## MUSIC 223

#### Music History to 1750

Music from primitive times to 1750. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: MX

## **General Education Courses**

## **MUSIC 224**

## Music History from 1750

Music from 1750 to the present. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 223, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

MX

IAI/GE: MX

## OCEANOGRAPHY

#### **OCEANOGRAPHY 101** Introduction to Oceanography

Third dimension of the ocean, its depth, and as new frontier awaiting exploration; interdisciplinary study of ocean and interphase between air and water and how

it affects the physical environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: TR

## PHILOSOPHY

## **PHILOSOPHY 105**

#### Logic

This course introduces students to methods of reasoning, inference, and argument. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.* 

3 LECTURE HOURS. 3 CREDIT HOURS.

## 

IAI/GE: DA KK MX OH TR HW WR

#### PHILOSOPHY 106 Introduction to Philosophy

Introduction to philosophical methods of inquiry through analysis and evaluation of influential philosophical ideas. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR

## PHILOSOPHY 107

Ethics

Introduction to representative ethical systems; approaches to problems of values and conduct. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### PHILOSOPHY 108 Philosophy of Religion

Introduction to major religious traditions, analyzing various conceptions of God, values, reason, and faith. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## PHILOSOPHY 201

#### **Greek Philosophy to Renaissance**

Introduction to philosophical problems encountered in science, ethics and politics, and art. Readings from Plato, Aristotle, St. Augustine, St. Thomas, St. Bonaventure and other Renaissance thinkers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: HW

#### PHILOSOPHY 202 Enlightenment to Present

Continuation of Philosophy 201; covers the periods from the 17th Century to the present. Readings from Descartes, Spinoza, Locke, Hume, Kant, Russell and Sartre. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: HW

## PHILOSOPHY 215

## **Problems in Philosophy**

Philosophical problems from such fields as ethics, metaphysics, aesthetics, and philosophy of science. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: TR

## PHILOSOPHY 216

## Critical Thinking

Introduction to the development of cognitive skills to evaluate claims and arguments in order to make sound judgments about beliefs and actions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **PHILOSOPHY 225**

## Philosophy of Art

Basic artistic concepts, including artistic creation and the aesthetic experiences; focus on values and meaning in the arts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



**General Education Courses** 

## **PHYSICAL SCIENCE**

## PHYSICAL SCIENCE 101

## General Course Physical Science

Introduction to the scientific method, astronomy, geology, and meteorology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### PHYSICAL SCIENCE 102 General Course Physical Science

Introduction to physics and chemistry; the relationship of matter and energy to physical and chemical changes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

IAI/GE: DA MX TR WR

## PHYSICAL SCIENCE 107

## **Current Public Issues in Physical Science**

Interdisciplinary approach to physical sciences; current public issues serve as framework for course that covers earth sciences (conservation, pollution, space exploration) as well as other branches of science, and social and humanistic aspects; integrates significant aspects of physical science with students other studies as well as daily living. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

## 

IAI/GE: OH TR HW

## PHYSICAL SCIENCE 111

**General Course I Physical Science** Introduction to the scientific method, astronomy, geology, oceanography, meteorology, and astronomy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 99 or higher or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



IAI/GE: KK MX OH TR HW WR

## PHYSICAL SCIENCE 112

## **General Course II Physical Science**

Introduction to physics and chemistry; the relationship of matter and energy to physical and chemical changes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 99 or higher or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### PHYSICAL SCIENCE 118 Introduction to Meteorology

An introductory course examining the physical properties of the atmosphere, radiation heating and cooling, precipitation, clouds, weather disturbances, climate controls, map reading, and application of the scientific method in analyses of the weather elements. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 99 or higher or consent of Department Chairperson.

## 3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



IAI/GE: HW

## PHYSICS

## PHYSICS 131

Mechanics and Power

A limited number of principles are covered with emphasis placed on applications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## PHYSICS 220

## **Physics Calculations and Practice**

Detailed practice in problems and application of theory for better understanding of physics; application of ideas of physics such as conservation laws, wave motion, invariance and trigonometry, analytic geometry, vector analysis, probability, and statistics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Physics 221 or Physics 231, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



IAI/GE: TR

## PHYSICS 221

## Mechanics, Waves and Heat

Foundations and concepts in Physics, including elementary problems in mechanics wave motion and heat. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 141 or higher, or concurrent enrollment in Mathematics 141 or 143 and Eligibility for English 101, or consent of Department Chairperson. 2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## PHYSICS 231

## **General Physics I: Mechanics and Wave Motion**

Statics and dynamics of a particle and a rigid body and oscillatory and wave motion with application to sound. Primarily for liberal arts students and those in pre-medical curricula. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Physics 220 and Grade of C or better or concurrent enrollment in Mathematics 141, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



IAI/GE: TR

## **General Education Courses**

## PHYSICS 235

## **Engineering Physics I: Mechanics and Wave Motion**

Exploration of the laws of mechanics and wave motion using calculus to analyze practical and theoretical problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 207, or concurrent enrollment in Mathematics 207 and Eligibility for English 101, or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



## POLISH

#### POLISH 104

## **Fourth Course Polish**

Review of language structure and interpretation of readings, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Placement test or Polish 103.* 

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: WR | HD

#### POLISH 214

## **Readings in Polish Literature**

Works from selected historical periods, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or Polish 104.

3 LECTURE HOURS. 3 CREDIT HOURS.

## WR

IAI/GE: WR | HD

## **POLITICAL SCIENCE**

## POLITICAL SCIENCE 200

## **Principles of Political Science**

Basic principles of political science. History, theories, and various traditional and modern approaches to the study of political institutions and ideas. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

## 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA

## **POLITICAL SCIENCE 201**

#### **The National Government**

Development, organization, and functioning of the American national government; origin, growth, and interpretation of the Constitution; legislative, executive, and judicial processes; and administrative development, controls, organization, and activities. Successful completion of this course may be used to fulfill the graduation requirement to pass the United States Constitution examination. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **POLITICAL SCIENCE 202**

## **Urban Government and Politics**

Development, forms, functions, powers and problems of urban government in the United States. Emphasis on metropolitan areas, such as Chicago, and intergovernmental relations; examination of local politics and pressure group activity, administrative organization, and fiscal responsibilities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### POLITICAL SCIENCE 203 Comparative Government

Principles of comparative study of political systems; political culture, governmental structures and institutions, political parties, groups, and ideology; understanding of political systems other than American. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX WR

#### POLITICAL SCIENCE 204 International Relations

Study of international relations and analysis of international behavior; role of nationstate and international organizations; factors underlying the development, character and, application of foreign policy; war and peace; major social and political forces at work in the contemporary world system. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### IAI/GE: DA KK MX TR WR

#### POLITICAL SCIENCE 205 Public Administration

Introduction to principles of public administration including the role of administration in modern government and administrative responsibility; organization, personnel management, fiscal operations, budgeting, purchasing, and planning. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **POLITICAL SCIENCE 206**

## **American Foreign Policy**

Examination of conduct and control of American foreign policy in today's complex world; analysis of development of American traditions in foreign policy, machinery which exists for conduct of American foreign relations, factors influencing foreign policy of the United States, and policies and problems relating to countries and regions of the world. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



**General Education Courses** 

## **POLITICAL SCIENCE 207**

## **U.S. State and Local Government**

Study of state and local political jurisdictions and systems, including their powers. organization, functions, development, and contemporary problems. This course will examine the American federal system with special emphasis directed to the governmental structures and public policies of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



IAI/GE: DA KK MX HW

#### **POLITICAL SCIENCE 211**

#### Analysis of White Racism

Nature of white racism: political, economic, social, and psychological effects on blacks and whites. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **POLITICAL SCIENCE 215 Politics of Community Organization**

Analysis of voting trends; discussion with community spokesmen and politicians; class participation in community politics such as voter registration and political education; how Chicago is governed; and role of Republican and Democratic parties and independents. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **PSYCHOLOGY**

## **PSYCHOLOGY 201**

## **General Psychology**

Historical survey of psychology and a study of the sensory and perceptual processes: learning, thinking, remembering, emotional behavior, motivation, mechanism of adjustment, and the total personality. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX OH TR HW WR

## **PSYCHOLOGY 203**

## The Psychology of Women

An application of the general principals of psychological scholarship and research to the subject of gender and women. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### **PSYCHOLOGY 205 Applied Psychology**

Applications of principles of psychology in industry, business, the professions, social welfare, and personal adjustment; career selection, industrial efficiency, advertising, sales, and the arts; and detection and treatment of delinquents and criminals. Writing assignments, as appropriate to the discipline, are part of the course

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. **3 LECTURE HOURS, 3 CREDIT HOURS,** 

## **PSYCHOLOGY 206**

#### **Business and Industrial Psychology**

Psychological principles and techniques applied to activities and problems in business and industry; selling, advertising, market research, personnel work, employee selection and training, supervision, and morale. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **PSYCHOLOGY 207**

## Child Psychology

Development, adjustment, and psychological problems of the child from birth through adolescence; relationship of scientific psychological findings to practical methods of child guidance and training by parents, teachers, and others. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



IA/GEI: DA HW KK MX OH TR WR

## **PSYCHOLOGY 208**

## **Psychology of Exceptional Children**

Considers children who do not respond to usual classroom teaching procedures. Includes problems of identification, diagnosis and potential assessment; surveys appropriate instruction and remedial teaching of mentally retarded, physically handicapped, gifted, culturally deprived, and maladjusted children. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 207 or consent of Department Chairperson. **3 LECTURE HOURS, 3 CREDIT HOURS,** 



## **PSYCHOLOGY 209**

## Black Psychology

Relationship of psychology to colonized situation; understanding colonial experience in psychological terms, emphasis on effects for black and white persons in America of status of blacks during and after legalized slavery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 





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**General Education Courses** 

## **PSYCHOLOGY 211**

#### Social Psychology

Analyzes development of personality structures and patterns: cultural environment, social roles and status, attitude formation, personality types, and measurement of personality. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



## IAI/GE: DA KK TR WR HW

## PSYCHOLOGY 214

## Adolescent Psychology

Continuation of Psychology 207. Physical, intellectual, educational, personality, and social development of adolescents in contemporary society; emphasis on problems of the adolescent's adjustment to personal and social environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 207 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: KK WR

## **PSYCHOLOGY 222**

## Adult Development and Aging

Introduction to psychological problems, issues, facts, and theories relating to later adulthood and old age; societal values and institutions, socioeconomic variables, biological and psychological changes, perception, cognition, psychosocial development, personality factors, sexuality and relationships, work and skill issues, adjustment and coping, psychopathology, and therapeutic intervention. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PSYCHOLOGY 224

## Life Span Developmental Psychology

Life Span Development Psychology is an introductory course in developmental psychology covering fundamental biological, cognitive, and psychological factors as they apply to the whole span of development. Theories, research design and findings, facts, and principles, as they apply to each age level, will be examined.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: WR

## RELIGION

#### **COMPARATIVE RELIGION 101** Introduction to Religion

Introduction to the nature, origin, beliefs, practices, and development of religion in society. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



COMPARATIVE RELIGION 102

## The Bible: Hebrew Old Testament

The study of the Old Testament with an emphasis on its historical, cultural, and intellectual settings; literary characteristics; and the scholarship related to its various translations and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: KK OH TR WR

#### **COMPARATIVE RELIGION 103** The Bible: New Testament

The study of the New Testament, with an emphasis on its historical, cultural, and intellectual settings; literary characteristics; and the scholarship related to its various translations and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: KK OH TR WR

#### **COMPARATIVE RELIGION 104** Islamic Scriptures: The Qur'an

The study of the Qur'an with an emphasis on its historical, cultural, and intellectual settings; literary characteristics; and the scholarship related to its various translations and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **COMPARATIVE RELIGION 106**

## **Comparative Religion I/Eastern Religion**

Comparison and investigation of major Eastern religions. Includes origins, rituals, religious knowledge, and destiny. This course concentrates on the religions of the Eastern world. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK MX TR WR | HD

#### **COMPARATIVE RELIGION 107**

## Comparative Religion II/Western Religion

Comparison and investigation of major Western religions. Includes origins, rituals, religious knowledge, and destiny. This course concentrates on the religions of the Western world. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



**INFORMATION SUBJECT TO CHANGE** 

## COURSE DESCRIPTIONS General Education Courses

## **COMPARATIVE RELIGION 108**

#### **Religion and Psychology**

The study of the relationship between religion and psychology. Includes the similarities between religious and psychological phenomena; ways religion and psychology shape and influence one another; and how human needs are met through the blending of religious and psychological experiences. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS,



## SOCIAL SCIENCE

## SOCIAL SCIENCE 101

## **General Course I Social Science**

A survey of subject matter and concepts selected from the disciplines of anthropology, psychology, and sociology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

IAI/GE: DA KK MX OH TR HW WR

## SOCIAL SCIENCE 102

General Course II Social Science

A survey of subject matter and concepts selected from the disciplines of economics, geography, history, and political science. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### IAI/GE: DA KK MX OH TR HW WH

#### SOCIAL SCIENCE 105 American Social Issues

Critical study of selected current social problems such as labor relations, the welfare system, civil rights, and automation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **SOCIAL SCIENCE 106**

#### North and South American Social Development

Structure and culture of modern urban and industrial development; topics include industrialization and leisure, their consequences for status and class organization in the work place and social organization in the wider community, social inequality, social stratification and mobility, and changing values and social structures. Writing assignments, as appropriate to the discipline, are part of this course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SOCIAL SCIENCE 221 Black Economics

African-Americans as producers rather than consumers, evaluation, understanding of black power and militancy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

КК

## SOCIOLOGY

#### SOCIOLOGY 201 Introduction to the Study of Society

Characteristics of group life, the effect of the group on human conduct, and the interrelationships between society, culture, and the individual. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



IAI/GE: DA KK MX OH TR HW WR

## SOCIOLOGY 202

## Sociology of Urban Life

Study of urbanization, personal and social disorganization, collective behavior, social movements and voluntary associations, race and ethnic relations, social stratification, industrial relations, and political sociology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## SOCIOLOGY 203

## Marriage and the Family

Study of the family as a dynamic social institution; emphasis on love, sex, dating, courtship and marriage, child rearing, marital problems, and divorce. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## SOCIOLOGY 205

## Social Problems

Understanding current social problems; sociological concepts student learns in Social Science 101 and Sociology 201 will be employed in analysis of concrete social problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## **General Education Courses**

## **SOCIOLOGY 207**

#### The Sociology of Sex and Gender

Examines the difference between behavior based on what society says is appropriate in order to be masculine or feminine. Examines the question of what forces in society are most influential in determining the place of men and women with special emphasis on power. Examines how this influence works through the process of socialization and core social institutions, including marriage and family, education, religion, the economy, and politics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

IAI/GE: DA HW WR | HD

#### **SOCIOLOGY 209**

## The Black Man in the U.S.

Environmental factors that identify African-Americans as an ethnic group in the United States; study of social values, attitudes, definition, behavior, social institutions, and processes of this ethnic group. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **SOCIOLOGY 211**

#### **Race and Ethnic Relations**

A comparative analysis of racial, religious, and ethnic groups. The course examines how group identity is formed and it is maintained or persists. It includes how group identity affects inter-group relations, social movements, government policy, and related social problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: TR WR | HD

#### SOCIOLOGY 225

### Introduction to Criminal Justice

Philosophical background of criminal justice; history, constitutional limitations, agencies, processes of justice, and human nexus; efficiency, morality, legality, and compassion criteria for judgment; research areas and trends. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

## KK

#### SOCIOLOGY 241 Institutional Racism

Survey of racism in basic institutions of American life: education, law enforcement, health services, government, business, industry, religion, entertainment, science, and housing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## SOCIOLOGY 280 Human Relations

Social and psychological aspects of inter-group relations; relationships between the dominant group and minority religious, ethnic, racial, and social class groups. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.* 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

TR

IAI/GE: TR | HD

## SPANISH

## SPANISH 104

## Fourth Course Spanish

Review of language structure and interpretation of readings, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Spanish 103; or Placement test and Interview with World Language Faculty.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

## SPANISH 111

#### **Spanish for Hispanos**

Formal structure of Spanish and preparation for enrollment in advanced courses. Writing assignments, as appropriate to the discipline, are part of the course. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.





IAI/GE: DA | HD

## SPANISH 113

#### Spanish for Near Native Speakers I

Review of formal structure and sound system of language for near-native speakers; emphasis on accurate, fluent, and effective oral expression. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

4 LECTURE HOURS. 4 CREDIT HOURS.



HD

#### **SPANISH 114**

#### Spanish for Near-Native Speakers II

Continuation of Spanish 113. Emphasis on reading and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Spanish 113 or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



## **SPANISH 191**

#### **Survival Spanish Nursing**

Provides trans-cultural training for nurses and future nurses. Emphasis is on enhancing quality patient care. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.





#### **SPANISH 206**

#### **Intensive Oral Practice Spanish**

Practice in spoken language, fluency, and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Spanish 104 or Placement test, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.

#### HD

#### SPANISH 210

#### Modern Civilization and Culture Spanish

Recent social, cultural, and historical trends, conducted in Spanish and English. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA KK WR

#### **SPANISH 213**

## Introduction to Modern Literature Spanish

Selections from contemporary writings, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Spanish 104 or Placement test, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: HW | HD

#### **SPANISH 214**

#### **Readings in Literature Spanish**

Works from selected historical periods, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Spanish 104 or Placement test, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: DA HW WR

## SPEECH

#### SPEECH 101

## **Fundamentals of Speech Communication**

Theory and practice of oral communication; development of poise and confidence, delivery, and speech organization; public speaking practice; small group discussion; and development of standards of criticism. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK MX OH TR HW WR

#### SPEECH 131

## Introduction to The Theater

Elementary principles of acting, directing, scene design, scene construction, costuming, lighting, sound, and makeup for the stage. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS** 



## THEATER ART

## **THEATER ART 131**

### Introduction to Theater

Introduction to Theater is a survey of theater, including basic elements and principles of production, styles, and historical perspectives of theater, dramatic literature, and criticism. Writing assignment, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/GE: KK HW WR

## THEATER ART 134

**Contemporary Theater in the U.S.** Survey of styles and literature of modern theater from 20th Century to present; includes musicals, dance, plays, and educational, professional and off-Broadway

trends. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.* 

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/GE: DA KK TR HW WR | HD

## ZOOLOGY

#### ZOOLOGY 211 General Zoology

Fundamental principles of animal morphology, physiology, genetics, and ecology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



IAI/GE: DA TR

Credit Courses (A-Z)

## CREDIT COURSES (A-Z) \_\_\_\_

## **AFRO-AMERICAN STUDIES**

#### AFRO-AMERICAN STUDIES 214 Hip Hop: Culture and Politics

The political significance, globalization, and history of Hip-Hop will be examined. Four of the multitude of musical permutations of American Hip-Hop (Rap, consciousness and social awareness, gangsta rap, and commercial hip-hop) and their relative/potential impact will be outlined. The materials and social culture that has come to be associated with Hip-Hop will be the primary focus. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101 and African-American Studies 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **AIR CONDITIONING**

## **AIR CONDITIONING 101**

## Introduction to Air Conditioning I

Fundamentals of heat and measurement; intensity, quantity, and modes of flow; factors of comfort studied and explored in relation to design of a system in connection with function of that system. Writing assignments, as appropriate to the discipline, are part of the course.

#### 3 LECTURE HOURS. 3 CREDIT HOURS.



## **AIR CONDITIONING 102**

#### Introduction to Air Conditioning II

Refrigeration, its theory, systems, components, and control as applied to air conditioning; study of refrigeration equipment, including function, selection, proper installation, maintenance, and service. Writing assignments, as appropriate to the discipline, are part of the course.

## **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### AIR CONDITIONING 103 Duct Design and Layout

Conventional low velocity duct design; high velocity air distribution design and systems using sophisticated design techniques; layout techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Air Conditioning 101 and Air Conditioning 102 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## AIR CONDITIONING 104

## **Equipment and Systems Controls**

Pneumatic, electric, and electronic controls and control systems; selection and design of control systems. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### AIR CONDITIONING 105 Owner-Contractor Management

Fundamentals of management techniques for air conditioning dealers, contractors, and entrepreneurs. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### AIR CONDITIONING 106 Sheet Metal I

Fabrication and installation of ducts used in air conditioning, ventilation, and heating systems. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

КК

#### AIR CONDITIONING 107 Welding I

Techniques of welding and cutting different metals under a variety of conditions. Students will learn to weld, butt, edge, lap, and fellet joints. Oxy-acetylene, oxy-propane, and carbon arc methods are employed. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **AIR CONDITIONING 120**

#### Introductory Laboratory

Shop and laboratory safety, use of hand tools for air conditioning, refrigeration and heating, use of meters, instruments, and gauges. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### AIR CONDITIONING 121 Advanced Laboratory

Covers meters, instruments, and troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## AIR CONDITIONING 150

Introduction to Refrigeration Servicing, installation, reinstallation, warranty, and troubleshooting of home and commercial refrigeration systems. Writing assignments, as appropriate to the

discipline, are part of the course. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### AIR CONDITIONING 151 Commercial Refrigeration

Selection, maintenance, and installation of commercial refrigeration. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Air Conditioning 150.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## INFORMATION SUBJECT TO CHANGE

## **AIR CONDITIONING 155**

#### **Refrigeration Laboratory**

Gauges, meters, and troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## AIR CONDITIONING 156

**Domestic Refrigeration Laboratory** Domestic and hermetic servicing. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **AIR CONDITIONING 157**

#### **Analysis Laboratory**

Analysis of domestic and commercial hermetic systems, mechanical and electrical servicing. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **AIR CONDITIONING 158**

#### **Commercial Refrigeration Laboratory**

Installation of components and complete systems, service, and maintenance of those components and systems. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## AIR CONDITIONING 160

#### Introduction to Principles of Heating

Warm air systems, hot water systems, steam systems, gas fuel, oil fuel, and coal fuel at both residential and commercial levels; control systems and their installation, maintenance, and service, and sub-electrical systems and their service. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **AIR CONDITIONING 165**

#### **Heating Laboratory**

General study of domestic and commercial systems. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **AIR CONDITIONING 204**

Advanced Control Systems

Theory, maintenance, and repair of advanced electrical, mechanical, and electronic controls, and control systems. Design techniques of control systems explored. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Air Conditioning 104.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## APPLICANCE TECHNOLOGY

## APPLIANCE TECHNOLOGY 101

## Introduction to Appliance Technology

Introduces students to major home appliance service requirements. Provides a study of customer relations and professional development in the workplace. Interpersonal relations, ethics in the workplace, service call planning, safe work practices, tools and equipment, installation procedures, and customer instruction practices are also introduced. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 3 LAB HOURS. 4 CREDIT HOURS.



#### APPLIANCE TECHNOLOGY 102 Electrical Fundamentals I

This course provides instruction in basic electricity and how these electrical fundamentals apply to electrical circuits in appliances. The students will also lay a foundation toward understanding basic electronics and its application in today's modern appliances. Induction motors and basic components are examined. Schematic diagrams will be introduced and analyzed. The principles of troubleshooting electrical circuits will be presented and practice with hands-on training in the classroom. The students will become acquainted with the use of Volt-Ohm-Meters (VOMs) and Amprobes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Appliance Technology 101.

**3 LECTURE HOURS AND 3 LAB HOURS. 4 CREDIT HOURS.** 



#### APPLIANCE TECHNOLOGY 103 Laundry Appliances I

This course provides instructions on installing, troubleshooting and servicing gas and electric clothes dryers. Students will learn the dryer mechanical assemblies, heat sources, air circulation systems through venting, electronic/electrical controls, and sensors. The properties of natural and bottled gas will be introduced. Students will practice troubleshooting electrical and mechanical malfunctions on classroom clothes dryers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Appliance Technology 101 and Electrical Fundamentals I, 102.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### **APPLIANCE TECHNOLOGY 104**

## **Refrigeration Fundamentals I**

This course presents the principles of refrigeration and air conditioning. The student will be prepared to enter the workforce as a refrigeration and air conditioning service technician. Brazing techniques will be taught and practiced during installation of access fittings, filter-driers, and compressors. The students will be prepared for certification in the recovery of Type I and Type II refrigerants. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Appliance Technology 101 and Electrical Fundamentals I, 102.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



## COURSE DESCRIPTIONS Credit Courses (A-Z)

## **APPLIANCE TECHNOLOGY 106**

#### **Kitchen Appliances I**

This course presents the principles of operation of ranges and ovens. The students will learn to how to troubleshoot electrical/mechanical oven components, oven controls, self cleaning circuits, as well as the proper servicing of gas burners. The student will also learn how printed circuit boards are used to control range/oven operations. 240/208 VAC electric range/oven technologies will be introduced. Convection ovens will be examined. Range/oven faults will be presented to students to test their ability to solve common service problems encountered in today's modern cooking appliances. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Appliance Technology 101, 102, and 103 and to be taken concurrently with 202.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



## **APPLIANCE TECHNOLOGY 202**

## **Electrical Fundamentals II**

This course continues instruction in basic electricity and how these electrical fundamentals apply to electrical circuits in appliances. The students will continue to build a foundation toward understanding basic electronics and its application in today's modern appliances. Induction motors and basic components are examined.

Prerequisite(s): Appliance Technology 101 and 102.

3 LECTURE HOURS AND 3 LAB HOURS. 4 CREDIT HOURS.



### **APPLIANCE TECHNOLOGY 203**

#### Laundry Appliances II

Students will learn the operation and installation of automatic clothes washers. Students will learn how to disassemble and reassemble the units for troubleshooting electrical, mechanical, and installation problems. The student will practice "handson" troubleshooting of electrical and mechanical faults. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Appliance Technology 101, 102, 103, and to be taken concurrently with Electrical Fundamentals II, 202.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.

## **APPLIANCE TECHNOLOGY 204**

#### **Refrigeration Fundamentals II**

This course presents advanced Type I, II refrigeration/air conditioning principles. The student will be prepared to enter the workforce as a refrigeration and air conditioning service technician. Brazing techniques will be taught and practiced during the installation of access fittings, filter-driers, and compressors. The students will be prepared for certification in the recovery of Type I and Type II refrigerants. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Appliance Technology 101, 102, 104, and to be taken concurrently with Electrical Fundamentals II, 202.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### APPLIANCE TECHNOLOGY 205 Refrigeration Fundamentals III

This course presents advanced Type I, II refrigeration/air conditionings principles. The student will be prepared to enter the workforce as a refrigeration and air conditioning service technician. Brazing techniques will be taught and practiced during the installation of access fittings, filter-driers, and compressors. The student will be prepared for certification in the recovery of Type I and Type II refrigerants. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Appliance Technology 101, 102, 104, 202, and 204.

3 LECTURE HOURS AND 3 LAB HOURS. 4 CREDIT HOURS.



#### APPLIANCE TECHNOLOGY 206 Kitchen Appliance II

This course presents the principles of operation/troubleshooting of microwave ovens and dishwashers. The students will learn the basic principles of microwave ovens, component testing/replacement, and the servicing/troubleshooting of electronic controls and circuits. The students will also learn how to diagnosis and repair the high voltage circuits in microwave ovens. Microwave emission checks, power output tests, and safety procedures will be practiced. The students will identify the electrical, mechanical, and water system components of today's modern dishwashers. They will learn how to open and close the units for troubleshooting electrical, mechanical, and installation problems. The students will practice troubleshooting electrical and mechanical faults on appliances in the classroom. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Appliance Technology 101, 102, 103, 106, and 202.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



## ARABIC

## ARABIC 101

#### Arabic for Beginners I

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on alphabet, vocabulary and structure needed for elementary speaking, listening, and reading. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### **ARABIC 102**

## Arabic for Beginners II

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on alphabet, vocabulary, and structure needed for elementary speaking, listening, reading, and translating. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Arabic 101, Placement test or consent of Department Chairperson.



## COURSE DESCRIPTIONS Credit Courses (A-Z)

## ARABIC 103

#### Intermediate Arabic I

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on the alphabet, vocabulary, and structure needed for elementary speaking, listening, reading, and translating. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Arabic 102, Placement test or consent of Department Chairperson.

**4 LECTURE HOURS. 4 CREDIT HOURS.** 



## ARABIC 104

#### Intermediate Arabic II

Introduction to Arabic language with emphasis on language of everyday conversation. Focus in on alphabet, vocabulary, and structure needed for elementary speaking, listening, reading, and translating. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Arabic 103, Placement test or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



## ARCHITECTURE

## **ARCHITECTURE 104**

#### **History of Architecture I**

The study of the development of early architecture through the mid-18th Century. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **ARCHITECTURE 105**

## **History of Architecture II**

The study of architecture since the mid-18th Century. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **ARCHITECTURE 121**

#### Architectural Drawing I

Introduction to techniques of graphic expression, emphasis on using graphic means for communication. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or concurrent enrollment in Architecture 170, and eligibility for English 100, or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## ARCHITECTURE 122

#### Architectural Drawing II

Continuation of Architecture 121. Emphasis on developing skills in shading, proportion, pencil and introduction to pictorial and other rendering techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 121, and completion of or concurrent enrollment in Architecture 171, or consent of Department Chairperson.

**3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.** 



#### ARCHITECTURE 123 Architectural Drawing III

Continuation of Architecture 122. Emphasis on developing skills in pictorial and perspective drawing and sketching, color, form, and presentation skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 122, or consent of Department Chairperson. 3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## **ARCHITECTURE 166**

## **Concepts of Planning**

In-depth examination of criteria which influence architecture; programming, site analysis, mechanical and structural considerations; applications of delineation techniques; examination of philosophy of significant architects and their work. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 121 and Grade of C or better or concurrent enrollment in Architecture 171 or consent of Department Chairperson.

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



## **ARCHITECTURE 170**

## Computer-Aided Design I for Architectural Drafting Techniques

Introduction to design and drafting techniques using computer-aided design (CAD) systems; use of basic command structures, keyboard and menu tablets; text, dimensioning and pen and layer selection. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **ARCHITECTURE 171**

#### Computer-Aided Design II for Architectural Drafting Techniques

Intermediate drafting and design techniques using computer-aided design (CAD) systems; dimensioning and text, 3D geometric constructs, advanced editing techniques, file handling and plotter utilization. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 170 or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

#### **ARCHITECTURE 172**

## Computer-Aided Design III for Architectural Drafting Techniques

Advanced drafting and design techniques using computer-aided design/drafting (CAD) programs; techniques of file handling, 3D drawing, solid modeling and rendering. Hardware and software requirements will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 170 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



Credit Courses (A-Z)

## **ARCHITECTURE 173**

#### Architecture: CAD with Third Party Applications

Introduction to third party programs used to develop architectural designs and construction documents via Computer-Aided Design (CAD). Add-on programming to the base drafting package AutoCAD. The student will have hands-on experience with automated architectural programs that streamline management of file handling and the basic command structure. Utilization of comprehensive library symbols with smart features. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 171, or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS, 3 CREDIT HOURS,



## **ARCHITECTURE 174**

### **Computer-Aided Design V for Architectural Drafting**

Introduction to third party programs used to develop architectural designs and construction documents via Computer-Aided Design (CAD). Add on program to the base drafting package AutoCAD. The students will have hands on experience with 3D studio. This course will include three-dimensional modeling with complete rendering. The model will include texture of materials, various lighting schemes with shade and shadow. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 171, or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **ARCHITECTURE 202**

## **General Construction**

Study of materials used in building construction, their growth or manufacture, preparation and application; emphasis on frame and masonry construction types; working drawings and structural details. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 121, and completion of or concurrent enrollment in Architecture 172, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **ARCHITECTURE 204**

#### **General Construction, Advanced**

Continuation of Architecture 202. Emphasis on advanced structural detailing and working drawings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 202, or consent of Department Chairperson. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **ARCHITECTURE 266**

## **Architectural Planning**

Application of planning concepts to basic architectural problems through development of selected design projects emphasizing relation of form to function; project presentation will employ models and pictorial rendering techniques in various media; current architectural thought explored through examples of various building types. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 166, or consent of Department Chairperson. 4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



## ART

## **ART 114**

## **Appreciation of Photography**

Topics from the history and technical development of photography from its invention to the present. Influence of other arts and sciences. May include darkroom work. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### ART 115 Photography

Basic principles of black and white photography, 35 mm cameras, exposure, development and printing processes, composition and presentation. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.

## ART 116

#### **Advanced Photography**

Advanced techniques in development and printing. Introduction to other formats. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 115, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## ART 117

#### **Beginning Color Photography**

Introduction to techniques, art and theory of color photography; printing from color negatives and/or transparencies, developing color negatives and/or transparencies; characteristics of different color film types, lighting for color photography; covers color theory and use of color in composition. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 115 and 116, or consent of Department Chairperson. **1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.** 



#### ART 126 Printmaking I

Processes of lithography and relief printmaking; includes line, shape, texture, value, and color in stone lithography, wood, linoleum printmaking. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.



#### ART 127 Printmaking II

Processes of intaglio, dry point, and screen printmaking, includes line, shape, texture, value, and color in printmaking process. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.



## COURSE DESCRIPTIONS Credit Courses (A-Z)

## ART 130

## African-American Art

Survey of African-American art over last 150 years; covers African-American crafts and sculpture during 19th Century; realistic painters of early 20th Century; cubistic and abstractionist influences on painting and sculpture; non-revolutionary artists such as Charles White, Henry O. Tanner, Aaron Douglas and Hughie Lee-Smith. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



## ART 131

## **General Drawing**

Still-life, landscape and human figure; experimentation with various media. Writing assignments, as appropriate to the discipline, are part of the course.

## 6 LAB HOURS. 3 CREDIT HOURS.

IAI/MAJOR: WR

#### **ART 132**

#### **Advance General Drawing**

This course builds on and refines the experiences of general drawing focusing on a variety of color media. Emphasis is on invention and formal concerns. Explorations into abstraction, non-objective, and fabricated image making are covered in this class. Course includes vocabulary development, critical analysis activities, and reference to historic models of drawing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 131.

6 LAB HOURS. 3 CREDIT HOURS.



IAI/MAJOR: WR

## **ART 141**

#### Introduction to the Visual Arts

Practical application of fundamentals of visual arts. Includes study of line, texture, color, shape, and volume in various media. Recommended for pre-teachers. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## ART 141

## Introduction to the Visual Arts

Practical application of fundamentals of visual arts. Includes study of line, texture, color, shape, and volume in various media. Recommended for pre-teachers. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.

## HW

## ART 142

## **Figure Draw and Composition**

Study of the human figure in action and still poses; rapid sketching, long poses, memory work, and portraiture. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 131, or consent of Department Chairperson.



## ART 143

## Advanced Figure Drawing

Development of  $\bar{s}$  kills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 142.





## **Two-Dimensional Design**

A studio course exploring the fundamentals of the formal systems and basic elements of visual organization through two-dimensional design principles and theories using a variety of media. Fundamental design and experimentation in relationships of line, shape, textures, and color. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.



IAI/MAJOR: WR

## ART 145

## **Three-Dimensional Design**

Study of the fundamentals of the formal systems and basic elements of visual organization through three-dimensional design principles and theories; use of a variety of media, including recent and traditional materials, such as clay and plaster. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 144, or consent of Department Chairperson.



IAI/MAJOR: WR

## ART 150

## **Crafts Workshop**

Creation and construction of art forms in clay, metal, cloth, fibers, plaster, and wood; art process in both two and three dimensions; recommended for preteachers. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## ART 161

## **Freehand Drawing**

Elementary drawing in charcoal and pencil from simple groups of block forms, still life, and architectural ornament; includes developing pencil technique. No previous drawing experience necessary. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.



## **ART 162**

## **Architectural Representations**

Continuation of Art 161. Experimentation with water colors and their use in rendering of architectural representation of building materials, textures, and nature; includes exterior and interior perspectives. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 141 and Art 161, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



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Credit Courses (A-Z)

## ART 163

## Watercolor Painting

Elementary painting and sketching including still life, landscape, and figure painting. Writing assignments, as appropriate to the discipline, are part of the course.



#### **ART 166**

## **Oil Painting Techniques**

A studio course that serves as an introduction to basic painting techniques and color principles applied to the exploration of oil and acrylic painting media. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 131, or consent of Department Chairperson.

# 6 LAB HOURS. 3 CREDIT HOURS.

#### ART 167 Advanced Oil Painting Techniques

Advanced techniques and experimentation in use of materials and the development of creative styles in oil painting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 166, or consent of Department Chairperson.

## 6 LAB HOURS. 3 CREDIT HOURS.

## 

## ART 172

#### **Communications Design I**

Design application and merchandising of products and ideas; theory of design of form and function applied to products, brochures, packaging, display, and other commercial designs; application of design in television, newspapers, magazines, billboards, and posters for advertising industry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 144, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### ART 176 Graphic Design I

Creative approach to graphics, using traditional and modern media, such as drawing, painting, photography, and constructed and sculptured art; includes reproduction of illustrations relating to advertising, and periodical and book publishing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 144.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## ART 177

## Graphic Design II

Continuation of Art 176. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 176.





#### ART 196 Ceramics

Ceramics formed by coil, slab, or free form methods. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.



## **ART 197**

### **Advanced Ceramics and Sculpture**

Advanced work in pottery and sculpture, use of molds and various materials, individual experiments in pottery and sculpture. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 196, or consent of Department Chairperson.

6 LAB HOURS. 3 CREDIT HOURS.



## ART 198

## Sculpture I

The creation of sculpture using the formal systems and elements of visual organization in a study of materials and processes; this is done using a variety of tools and media, including but not limited to contemporary and traditional materials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Art 145, or consent of Department Chairperson.

## 6 LAB HOURS. 3 CREDIT HOURS.

#### ART 200 Individual Art Projects

For advanced students who have completed beginning level studies in the corresponding discipline specific course, or an equivalent course at another institution, or who can demonstrate proficiency through portfolio review in the skills taught in the corresponding 100 level course. Work is completed on an independent project, the subject of which is designed through dialogue between students and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated six credit hours will be counted towards graduation. **ARC: 3 times.** 

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **ART 200-8**

#### **Art Projects: Advanced Ceramics**

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 197, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



ART 200-9

#### Art Projects: Computer Art/Application

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 275, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-A

#### **Art Projects: Photography**

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 115, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-B

#### Art Projects: Advanced Photography

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 116, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

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#### **ART 200-C**

#### Art Projects: Color Photography

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 117, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **ART 200-D**

#### Art Projects: Printmaking I

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 126, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-E

#### Art Projects: Printmaking II

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 127, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-F

#### **Art Projects: General Drawing**

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 131, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 200-G

#### Art Projects: Advanced Drawing

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 132, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 200-H

#### Art Projects: Painting I

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 134, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 200-I

#### Art Projects: Painting II

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 135, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



Credit Courses (A-Z)

#### ART 200-J

#### Art Projects: Painting III

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 136, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-K

#### **Art Projects: Introduction Visual Arts**

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 141, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-L

# Art Projects: Figure Drawing

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 142, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

# 

#### **ART 200-M**

#### Art Projects: Advanced Figure Drawing

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 143, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **ART 200-N**

#### Art Projects: Two-Dimensional Design

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 144, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# **ART 200-O**

# Art Projects: Three-Dimensional Design

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 145, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-P

#### Art Projects: Crafts Workshop

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 150, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 200-Q

#### **Art Projects: Freehand Drawing**

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 161, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 200-R

#### Art Projects: Architectural Rep

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 162, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 200-S

#### Art Projects: Watercolor Painting

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 163, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



**ART 200-T** 

#### Art Projects: Oil Painting

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 166, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-U

#### Art Projects: Advanced Oil Painting

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 167, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

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#### ART 200-V

#### Art Projects: Communication Design I

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 172, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

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#### **ART 200-W**

#### Art Projects: Advanced Communication Art

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 174, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **ART 200-X**

#### Art Projects: Graphic Design I

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 176, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-Y

# Art Projects: Graphic Design II

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 177, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ART 200-Z

#### Art Projects: Ceramics

For advanced students who have taken all or most other art courses. Work on individual projects. Hours scheduled at convenience of student and instructor. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in English 100 or Art 196, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# ART 272

# **Communication Design II**

Story boards for television commercials, graphics design for television, and development and making of television commercials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 172, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



# ART 275-1

#### **Computer Art and Applications**

An introduction and exploration of electronic imaging through hands-on experience of applications in computer graphics. A variety of software packages pertaining to art will be utilized, as well as input and output devices. The goal of the course is to begin to develop imaging skills in graphics systems. Students will also be introduced to computer concepts of design, color, image importing and exporting, image manipulation, and sequencing techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Art 144, Art 131 or Art 115, or consent of Department Chairperson.

6 LAB HOURS. 3 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY**

#### AUTOMOTIVE TECHNOLOGY 101 Introduction to Automotive Technology

Lecture and laboratory course covering the operating principles of the modern automobile. Subjects will include Preventive maintenance of the cooling system, fuel system, tires and wheels, lubrication system, and accessories. Course will include career exploration and automotive academics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 103**

#### **Engine Concepts**

Disassembly, inspection, and service of automotive engines with major emphasis on operational diagnostic and service. Students gain skills based on industry standards to perform precise diagnostics to solve operational issues related to the automotive engine. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or concurrent enrollment in Automotive Technology 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



# AUTOMOTIVE TECHNOLOGY 104

#### **Electrical Systems and Power Accessories**

Introduction to theory, diagnosis, and repair of automotive electrical and electronic components and systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or concurrent enrollment in Automotive Technology 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



# **AUTOMOTIVE TECHNOLOGY 105**

#### Fuel Management I

Service techniques and theories of operations necessary to maintain modern fuel delivery systems. Service will be performed on modern fuel injection systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 103 or Automotive Technology 104, or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 106**

#### **Fuel Systems**

This further study of the fuel system provides students with an opportunity to acquire knowledge of the construction, operating principles and components of automotive fuel systems. Students perform service on carburetors as well as fuel injection systems in accordance with established industry standards. Writing assignments, as appropriate of the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101 and Automotive Technology 104.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 107**

#### Automotive Body Welding

Students will acquire knowledge and skills using MIG, TIG and spot welding equipment before welding operations in repairing damaged auto bodies. Proficiencies will be developed in butt and lap welding on light-gauge metal. Course will include replacement of body panels using adhesive techniques. All work performed must be in accordance with established collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 108-1 Work Based Learning I

Introduction to applied automotive technology in an actual work setting. Provides hands-on experience in an automotive shop. Students work on actual vehicles, carrying jobs from assignment through completion. Business operators will supervise students at the worksite. Instructors will supervise all on-campus work, and also visit off-campus worksites to observe, monitor, and critique student performance. Writing assignments, as appropriate to the discipline, are part of the course.

1-2 LECTURE HOURS AND 10-20 LAB HOURS. 3-6 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 109 Automotive Brakes

Theory of operation and servicing of braking systems, both conventional and computerized anti-lock brake systems. Emphasis on diagnostic procedures; inspection techniques and service. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or concurrent enrollment in Automotive Technology 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 111 Auto Parts Specialist I

Lecture and laboratory course covering the principles of selling automotive parts in retail and wholesale parts establishments. Subjects will include: customer relations, parts identification and usage, stockings control, products knowledge, telephone ethics, selling skills, and cataloging. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 9 LAB HOURS. 6 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 112 Auto Parts Specialist II

Lecture and laboratory course covering skills necessary to manage an automotive parts retail store. Subjects will include customer relations, building team staff, inventory control, corporate relationships, conflict resolution, and business analysis. Writing assignment, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 111.





# **AUTOMOTIVE TECHNOLOGY 117**

#### Auto Body Reconstruction I

Study of the principles and techniques of auto body sheet metal connections, use and care of basic tools, types and application of fillers, analysis of the extent of damage, and performance required repair operations. Students develop skills in repairing and/or removing and replacing damaged body panels. Emphasis is placed on developing proficiency in repairing body damage according to establish collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 107, or consent of Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 118**

#### Auto Body Repainting I

Students will execute the techniques of preparing body surfaces, selecting and mixing paint, and spraying. Refinishing techniques will be performed on individual panels until each student demonstrates competency to refinish a live vehicle. Course will also emphasize recognizing and performing repair techniques for damage paint finishes in accordance with collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



# **AUTOMOTIVE TECHNOLOGY 119**

# **Automotive Body Detailing**

Study of the principles of auto body detailing for post collision repaired vehicles and new and used car customer delivery service. Students will develop skills in selection and use of proper cleaning and polishing materials, proper buffing and polishing techniques, preparation of plastic bumpers and accessories, steam cleaning of engine components, care of rubber parts, and interior cleaning. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



# **AUTOMOTIVE TECHNOLOGY 130**

#### **Topics in Alternative Fuel Technology**

This course will introduce students to special topics in alternative fuel vehicles and all related technology. Additionally, the course will provide the knowledge base needed to understand alternative fuel vehicles, green technology, and their effect on the current and future of the world. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101,104,105,204,205 and 206; or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 204 Electrical Systems II

This course is designed to provide the necessary knowledge and skills to service today's automotive electrical systems. Selected topics include the reading of wiring diagrams, diagnosing electrical accessories, and operating and designing ignition systems. Students learn circuit testing on today's modern multiplex and CAN/BUS system protocol. Course will emphasize proper handling of advanced solid-state electronics such as air bags and computers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101 or Automotive Technology 104, or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 205 Fuel Management II

Emphasis on servicing of computerized engine and body controlled modules. Emphasis on service techniques for OBD II foreign and domestic computer control system. Students will gain skills in the use and interpretation of data related to modern diagnostic test equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 105.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 206 Fuel Management III

This course builds upon the knowledge gained in previous fuel management courses with emphasis on diagnosis and repairs to sensors and actuators that control engine performance. Students will gain advanced diagnostic skills to interpret waveform patterns through the use of laboratory scopes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 205.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 207 Transmission Transaxle and Drive

This course will cover three, four, and five speed manual transmissions/transaxles and all automotive transmissions/transaxles used on front wheel drive passenger cars. Diagnosis and repair procedures will be covered in detail. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101 and Automotive Technology 212.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 208 Work Based Learning II

Advanced hands-on experience in an automotive shop. Students work on actual vehicles, carrying jobs from assignment through completion. Business operators will supervise students at the worksite. Instructors will supervise all on-campus work based learning students, and also visit off-campus worksites to observe, monitor, and critique student performance. Writing assignments, as appropriate to the discipline, are part of the course.

1-2 LECTURE HOURS AND 10-20 LAB HOURS. 3-6 CREDIT HOURS.

# AUTOMOTIVE TECHNOLOGY 209

**Steering and Suspension Systems** 

Theory of operation in servicing of suspension systems both rear and front wheel drive systems. Students gain skills in the use of computerized four-wheel alignment equipment, servicing McPherson struts, shock absorbers, rack and pinion and conventional steering systems. Diagnosis and service of Tire Monitoring Systems (TMS) is now part of the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or Concurrent enrollment in Automotive Technology 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### AUTOMOTIVE TECHNOLOGY 210 Performance and Driveability

This course covers the construction, operations, and testing of the ignition systems. Training is offered on the use of oscilloscopes, infrared gas analyzers, and other diagnostic equipment such as scan tool testing. Writing assignments, as

appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Automotive Technology 101, Automotive Technology 104, Automotive Technology 106 and Automotive Technology 204.* 

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 211**

#### **Auto Service Management**

Instruction in management skills related to inventory control, writing estimates and repair orders, billing, employee relations, time management, vendor relation, business financials, and customer relations. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 212**

#### **Manual Drive Train and Axles**

Upon successful completion of this course students will demonstrate understanding of design, construction, operation and the service principles of automotive clutches, manual transmissions, drivelines, differentials, and rear axles. Service work includes using appropriate repair and test equipment, determining problems or extent of damage, and performing corrective work in accordance with established industry standards. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or Concurrent enrollment in Automotive Technology 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



# **AUTOMOTIVE TECHNOLOGY 215**

**Auto Temperature Control Systems** Service procedures and theory of operation of both manual and electronically controlled heating and air conditioning systems. Emphasis will be on diagnosis, service, and replacement of air conditioning components. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 217**

#### Auto Body Reconstruction II

Students will increase their knowledge and skills by repairing more complex, extensive damages. Removal and installation of trim, body panels, welding, aligning various body components of the body, repairing of body hardware and accessories. Repairing or replacement of mechanical components as required for complete reconstruction of the vehicle is emphasized in this course. Students will utilize estimating skills to estimate the extent of damaged, repair time, cost of repairs, and repair strategies. All work will be performed in accordance with established collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 117. 1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 218** Auto Body Repainting II

Students will build on their refinishing skills learned in Automotive Technology 118 course. Advanced refinishing techniques are emphasized through practical application of auto body refinishing techniques on live vehicles as well as panels. As refinishing skills increase in proficiency, students will acquire skills to perform color matching to refinish weathered finishes and localized panel damage repairs. Students will be evaluated on their ability to complete refinishing assignments in accordance with industry standards. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 118.

1 LECTURE HOUR AND 6 LAB HOURS, 3 CREDIT HOURS.



#### **AUTOMOTIVE TECHNOLOGY 220 Collision Estimating**

Estimating for automotive insurance claims and adjusting damages. Emphasis will be on appraisal procedures, flat rate computations, use of collision estimator, and preparation of insurance claim forms. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.

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#### **AUTOMOTIVE TECHNOLOGY 230**

#### Introduction to Alternative Fuel Technology

This course will introduce students to the theories and service techniques of alternative fuel vehicles in today's society. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101,104,105,204,205, and 206; or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.

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#### **AUTOMOTIVE TECHNOLOGY 231 AFT Hybrid Fuel Vehicles**

This course builds upon the knowledge gained in the previous alternative fuel courses with an emphasis on theories and servicing techniques of hybrids and fuel-cell vehicles. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101,104,105,204,205 and 206; or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS, 4 CREDIT HOURS,

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#### **AUTOMOTIVE TECHNOLOGY 232** Hybrid and Fuel Cell Vehicles

In this course, students will learn about alternative fuel technologies, apply advanced service techniques, and experiment with electric, hybrids, fuel-cell and other alternative energy source vehicles. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Automotive Technology 101,104,105,204,205 and 206; or consent of Department Chairperson.

2 LECTURE HOURS AND 9 LAB HOURS, 5 CREDIT HOURS,



# AVIATION

#### **AVIATION 202**

#### Avionics I

Basic electrical principles and application of those principles to aircraft electronics systems, including operation, component description and location and performing line, overhaul, and preventive maintenance of aircraft communications equipment. Covers basic operation, location of components, descriptions of their functions, and trouble-shooting aircraft instrument systems. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS AND 9 LAB HOURS, 6 CREDIT HOURS,** 



#### AVIATION 203 Avionics II

Performing maintenance, preventive maintenance, and troubleshooting aircraft navigation systems and auto flight guidance systems installed in aircraft. How to perform the installation, fabrication and repair of electrical equipment and wiring harnesses, use basis test equipment to troubleshoot electrical and electronic systems, interpret technical information, understand schematic diagrams and become familiar with the standard practices used in the aviation industry. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 9 LAB HOURS. 6 CREDIT HOURS.

# DA

#### **AVIATION 213**

#### **Basic Avionics Aviation Radio Communications**

Advanced electrical principles and application of those principles to aircraft electronic systems. This course will cover analog and digital electronics; data transmission and troubleshooting principles applicable to bench repair work; the principles of radio receivers, transmission lines, how to perform bench maintenance, and preventive maintenance; alignment of aircraft communications equipment, adjustments, and troubleshoot aircraft instrument systems. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 9 LAB HOURS. 6 CREDIT HOURS.

# DA

# AVIATION 214

#### **Basic Avionics Navigation Systems**

Advanced electrical principles and application of those principles to aircraft electronic systems. This course will cover analog and digital electronics, data transmission and troubleshooting principles applicable to bench repair work. Course includes bench maintenance, adjustments/alignments, preventive maintenance, and troubleshooting aircraft navigation systems including those on auto-flight guidance systems installed in aircraft. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 9 LAB HOURS. 6 CREDIT HOURS.

# DA

#### **AVIATION 215**

#### **Basic Avionics Aviation Maritime Tech**

Bench maintenance, adjustments and alignment, and preventive maintenance on radar systems installed in aircraft to include associated instruments and other components. Transmission line theory and propagation to include fiber optics, microwave satellite systems, and selected topics using state-of-the-art equipment and lab applications. Course will also cover a comprehensive review of the procedures and practices required by the maritime services regarding navigation and communication systems utilized. A study of the rules and regulations required for operation of maritime vessels. At the completion of this course students will have the knowledge and skills necessary to pass the FCC General Radiotelephone License Examination. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 9 LAB HOURS. 6 CREDIT HOURS.



# **BAKING AND PASTRY**

# **BAKING AND PASTRY 765**

# Introduction to Baking

The focus of this course will be an introduction to culinary history with emphasis on baking and pastry; instruction in principles and procedures of basic equipment and its use; and beginning fundamentals of baking. A look at the contemporary employment options in this field will compare restaurant, specialty (e.g., wedding cakes), retail, and wholesale careers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Baking and Pastry 766, 767, 768, and 769.

3 LECTURE HOURS. 3 CREDIT HOURS.

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#### BAKING AND PASTRY 766 Baking Safety and Sanitation

An introduction to safe food production practices. Topics will include prevention of food-borne illness, HACCP procedures, facility sanitation, legal guidelines, kitchen safety, and safe food preparation, storing, and reheating guidelines. The National Restaurant Association ServSafe examination will be a part of this course. Students who pass the exam will receive the ServSafe certification. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Baking and Pastry 765, 767, 768, and 769.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### BAKING AND PASTRY 767 Baking Techniques

This course provides an introduction to the functions of baking ingredients (flour, sugar, fat, eggs, and liquids) and mixing methods for doughs, fermentation techniques, and bread baking. Special emphasis will be placed on lean dough production and enriched dough methods (laminating, rubbing, and cut-in). Training in evaluation techniques of finished products will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Baking and Pastry 765, 766, 768, and 769.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



# BAKING AND PASTRY 768

**Pastry Techniques** 

An introduction to pastry products and methods, this course will include lamination, short crust, liaison, meringue, pastry cream, pate a choux, vanilla sauce, ganache, custard. and mousse. Assembling the various components into completed pastries will include filling, glazing, garnishing, and making a variety of sauces. Students will learn to evaluate the quality of the items that are produced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Baking and Pastry 765, 766, 767, and 769.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### BAKING AND PASTRY 769

#### **Cookies and Tarts**

An introduction to a variety of mixing methods, doughs, batters, fillings and glazes with emphasis on preparing unfilled and filled cookies, mignardises, tarts, a variety of petit fours and other one bite items. Emphasis will be on production and will include specialty preparations, like gingerbread houses. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Baking and Pastry 765, 766, 767, and 768.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



# **BAKING AND PASTRY 770**

#### **Basic and Classical Cakes**

With emphasis on the different mixing and assembly methods, students will prepare a variety of classical cakes from simple pound cakes to elaborate filled cakes and tortes. Classical preparations will include Sacher Torte, Dobos Torte, Opera Torte, Marjolaine, Gateaux St. Honore, and Charlottes. Piping skills will be introduced and practiced. Writing assignments, as appropriate to the discipline,

Prerequisite(s): Grade of C or better in Baking and Pastry 767, 768 and 769; concurrent enrollment in Baking and Pastry 771, 772, and 773.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



# **BAKING AND PASTRY 771**

#### **Special Occasions Cakes**

Decorating techniques will be practiced, including flowers and borders, royal icing, fondant draping, crimping and ruffling and gum paste flowers. Students will prepare special occasion cakes, seasonal cakes, and classical and contemporary wedding cakes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767, 768 and 769; concurrent enrollment in Baking and Pastry 770, 772, and 773.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



# **BAKING AND PASTRY 772**

#### **Individual Pastries**

Quantity production will be a key element of this course. From scaling recipes and calculating yields to working a pastry station, each student will be exposed to volume production for pastry buffet tables and retail operations. Emphasis will include presentation and plate designs for banquet desserts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767,768 and 769; concurrent enrollment in Baking and Pastry 770, 771, and 773.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



# BAKING AND PASTRY 773

# **Confectionary Arts**

Display pieces are an important art in the pastry chef's repertoire. This course will serve as an introduction to chocolate, sugar, marzipan, finishing techniques, molds and templates. Each student will create a centerpiece utilizing the skills learned. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767,768 and 769; concurrent enrollment in Baking and Pastry 770, 771, and 772.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### BAKING AND PASTRY 774 Hearth Breads and Rolls

Learn to mix, shape, bake and store bread and rolls. Emphasis will be on efficiency and increased speed in production of quality products. Students will use traditional fermentation methods, equipment, and methods to emphasize flavor, texture, and appearance as well as techniques that increase shelf life. Students will learn to evaluate the quality of the items that are produced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767, 768 and 769; concurrent enrollment in Baking and Pastry 775 and 776.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



# BAKING AND PASTRY 775

# **Specialty Breads**

This course will introduce advanced bread principles and techniques, including regional and ethnic breads. Production will include multi-grain breads, sourdoughs, bagels, pretzels, holiday or seasonal breads, and flat breads. Special emphasis will be placed on mixing, shaping, and finishing specialty breads; and innovative baking methods. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767, 768 and 769; concurrent enrollment in Baking and Pastry 774 and 776.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### **BAKING AND PASTRY 776**

#### **Advanced Baking Principles**

We live in a world where many people have special dietary needs. This course examines baking methods and principles from a nutritional and chemical/physical point of view. Topics to be covered include: diets such as vegan, diabetic, low carb and gluten-free, nutritional analyses, and preparation of items for persons with special dietary needs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767, 768 and 769; concurrent enrollment in Baking and Pastry 774 and 775.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.

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# BAKING AND PASTRY 777

Chocolate and Confections

This course introduces students to the tempering of chocolate, creation of chocolate sculptures and simple centerpieces, and production of chocolates and other confections including fudge, fondant, nougat, caramel, toffee and truffles. Emphasis will be on creating confections by hand and with special equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767, 768, 769, 773, and 776; concurrent enrollment in Baking and Pastry 778.

#### 1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### **BAKING AND PASTRY 778**

#### **Contemporary Desserts**

Assembled and decorated with a modern approach, desserts will be produced using the latest technology and equipment. Students will use specialized equipment, practice new presentation methods, and focus on freshness, simplicity of style, and ease of production. Each student will produce a plated dessert and centerpiece using a variety of the techniques learned throughout the program and showing key elements of production, design, freshness of flavor and consistency. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Baking and Pastry 767,768,769, 773, and 776; concurrent enrollment in Baking and Pastry 777.

1 LECTURE HOUR AND 15 LAB HOURS. 6 CREDIT HOURS.



# BIOLOGY

#### **BIOLOGY 100**

#### **Critical Readings in Biology**

Prepares students to read in the life sciences. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BIOLOGY 101

#### General Course Biology I

Basic principles and concepts of biology; general considerations of biological processes, including cellular and organismic levels. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BIOLOGY 102**

#### **General Course Biology II**

Continuation of Biology 101. Basic principles and concepts of biology, including how organisms reproduce and inherit; how life on earth evolved and how present day organisms relate to each other. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 101, or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BIOLOGY 103

#### **Biology of Human Sexuality**

Structure and function in human sexuality; sexuality related to physical, mental, and emotional health; the relationships between sexual behavior and human ecology, population, gene frequencies, and society. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### BIOLOGY 110 Human Ecology

Effects of dense population, effect of humans on air, minerals, water, noise; and how these affect humans. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BIOLOGY 120**

#### **Terminology for Medical Careers**

Basic medical vocabulary for allied health professionals and others with minimal background in anatomy and physiology; includes study of the human body systems. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BIOLOGY 130**

#### Human Cadaver Anatomy I

Student-directed learning experiences designed to enhance histology and human cadaver competence. Includes osteology, articulations. Skeletal muscles, and neurology. Will satisfy 30 contact hours requirement of Occupational Therapy, Physical Therapy and other medical programs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 226.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



# BIOLOGY 131

#### Human Cadaver Anatomy II

Continuation of Biology 130. Directed learning experiences are designed to enhance histology and human cadaver competence. Primarily stresses the following areas: cardiovascular, thoracic and abdominal cavity systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 226 and 227, or consent of Department Chairperson.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.

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# **BIOLOGY 200**

# **Field Biology**

Natural history of local biota. Laboratory and field identification of plants and animals with a study of their habitats and relationships. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### BIOLOGY 201

#### Individual Topics in Biology

Students may conduct laboratory research, engage in a library project, and attend seminars. Writing assignments, as appropriate to the discipline, are part of the course. **<u>Allowed Repeatable Course:</u>** No more than 2 credit hours counted toward graduation. **<u>ARC: 4 times.</u>** 

1 LECTURE HOUR AND 0.5 LAB HOUR. 1 CREDIT HOUR.



#### **BIOLOGY 205**

#### Pathophysiology

This course introduces students to pathophysiology, which is the systematic study of the functional changes in cells, tissues, and organs altered by disease and/ or injury. Students will also be introduced to the molecular and cellular basis of disease. Background in Anatomy and Physiology (Biology 226 and 227) is highly recommended for this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 120, 121, or Biology 115 and English 100.

Credit Courses (A-Z)

#### **BIOLOGY 209** Biochemistry

Biochemistry is designed to give students in life sciences, allied health fields, and biotechnology a basic understanding of the biological processes at the molecular, cellular and organismic level. An emphasis is placed on the use of laboratory tools and equipment in order to familiarize students with current biochemical techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 121, and one year high school Chemistry or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



# BIOLOGY 210

#### Survey of Biotechnology

This course will serve to introduce students to modern biotechnology which is based on recent developments in molecular biology, especially those in genetic engineering and bioengineering. Students will explore the diversity of the field focusing on such areas as medicine, biohazard, bioremediation, biocatalysis, biosafety, agriculture, forensics, quality control and assurance, testing, regulation, law and policy, intellectual property, proteomics, pharmacogenomics, nutrition, and product development. This course will incorporate speakers that are representative of specific areas in biotechnology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 121 and CHEM 121.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



# BIOLOGY 226

#### **Human Structure and Function I**

Human anatomy and physiology. This laboratory course is recommended for those contemplating a career in the health professions and emphasizes the structure and function of the human body. Microscopic and gross anatomy are correlated with physiology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 121.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.

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#### **BIOLOGY 227**

#### **Human Structure and Function II**

Continuation of Biology 226. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 226, or consent of Department Chairperson. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **BIOLOGY 236** Environmental Biology II

This course is a continuation of Biology 119. Environmental sampling and analysis techniques will be taught in the laboratory. Topics such as environmental toxicology, bioremediation, genetic contamination of plant species, conservation biology, and environmental law, policy and ethics may be covered in the lecture. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### BIOLOGY 241 Genetics

Principles of heredity, structure of genetic material, mechanism of transmission, and the role of genetics in evolution. Application of these principles to human and other organisms is included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 101 and 102, or Biology 114 and 115, or consent of Department Chairperson.

2-3 LECTURE HOURS AND 4 LAB HOURS. 3-4 CREDIT HOURS.



# **BIOLOGY 242**

#### Evolution

Origin, history and development of plants and animals. Includes evidence from anatomy, paleontology, comparative physiology, biochemistry, immunology, and genetics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 101 and 102, or Biology 114 and 115, or consent of Department Chairperson.

2-3 LECTURE HOURS. 2-3 CREDIT HOURS.



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#### **BIOLOGY 250**

#### Introduction to Molecular Biology

The first course in a three-part series in the biotechnology Program/Plan 215. This course stresses an introduction to current concepts and progress in modern molecular biology with emphasis on DNA science and genetic engineering as it applies to molecular, cellular and organismic biology. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated six credit hours will be counted toward graduation.

Prerequisite(s): Grade of C or better in Biology 121, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



# BIOLOGY 251

# Molecular Biology I

The second course in a three-part series in the biotechnology Program/Plan 215. The course stresses the theory and practice of separation techniques and safety procedures that would be employed in the purification and assay of such biomolecules as nucleic acids, proteins and other related substances and the relationship of these molecules to living organisms. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 250, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



# BIOLOGY 252

#### Molecular Biology II

The third course in a three part series, stresses the theory and practice of current techniques used in DNA science, protein isolation, immunology and introduces selected biotechnology protocols. An emphasis is placed on the use of laboratory tools and equipment in order to familiarize students with current biochemical techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 251, or consent of Department Chairperson. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **BIOLOGY 253**

#### **Plant Molecular Biology**

This course is designed for students in the life sciences, and biotechnology to understand how plants function at the molecular level and discuss the current advances in plant molecular biology and genetic engineering. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 121 or 250, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BIOLOGY 260**

#### Introduction to Bioinformatics

This course will cover a range of bioinformatics, research using a case-based, problem-solving approach. The course will consist of a combined lecturer-computer laboratory format to provide hands-on experience in applying bioinformatics to a variety of research problems, including genomic analysis, DNA microarray analysis, phylogenetics, three-dimensional structure prediction, and proteomics. Special attention will be paid to ethical, legal and personal concerns in the practice of bioinformatics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade C or better in Biology 121, 122, and 210 and Mathematics 140 and Computer Information Systems 142 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **BIOLOGY 299**

#### **Special Topics in Biology**

Special topics in biology and biotechnology will be discussed along with appropriate lab and/or field trip activities. New developments will be emphasized, especially materials useful in K-12 education and industry. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

0.5-5 LECTURE HOURS AND 1-2 LAB HOURS. 1-6 CREDIT HOURS.



#### **BUSINESS**

#### **BUSINESS 111**

#### Introduction to Business

Survey of modern US business, analyzing organization and types of businesses, major business functions, business and the environment, roles played by business and consumers in the economy and various economic systems. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 141** Business Mathematics

Review of basic arithmetic principles, application of arithmetic operations to business forms and to analysis and solution of problems of percentage, markup and markdown, discounts, interest, prorating, life and property insurance, taxation, and payrolls. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 147**

#### Introduction to Paralegal Studies

This course is the first of the required courses in the Paralegal AAS Program/Plan 304. It provides an overview of the American legal system. It explores essential knowledge in the paralegal field, including the basic skills, concepts, and reasoning processes for success in a paralegal career. This course explores basic paralegal roles and responsibilities and specific limitations as they relate to the legal system and the law office environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and college level math. Students not meeting college level math eligibility must complete Mathematics 99 with a C grade or better. Business 147 can be taken concurrently with Business 148 Civil Litigation and Business 149 Family Law

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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# **BUSINESS 148**

**Civil Litigation** 

This course is one of the requirements of the Paralegal AAS Program/Plan 304. It introduces students to procedural concepts of the civil litigation process in state and federal courts with an emphasis on Illinois and federal civil codes. It examines the role of the paralegal from the initial phases of the pre-trial investigation and discovery through the appeals process while emphasizing legal theory and practical skills. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and college level math. Students not meeting college level math eligibility must complete Mathematics 99 with a C grade or better. Business 148 can be taken concurrently with Business 147 Introduction to Paralegal Studies and Business 149 Family Law.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BUSINESS 149

#### **Family Law**

This course is one of the requirements of the Paralegal AAS Program/Plan 304. It is an overview of the basic principles of family law and domestic relations, with an emphasis on Illinois law. It examines the areas of marital contracts, divorce, annulment, issues affecting children, and other legal matters relating to domestic relations. It also covers client interviews, the drafting of necessary pleadings and supporting documents, and the performance of basic research relating to family law and domestic relations as well as the role of the paralegal in family law. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and college level math. Students not meeting college level math eligibility must complete Mathematics 99 with a C grade or better. Business 149 can be taken concurrently with Business 147 Introduction to Paralegal Studies and Business 148 Civil Litigation.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### BUSINESS 150 Legal Research and Writing I

This course is one of the requirements of the Paralegal AAS Program/Plan 304. It provides an overview of the fundamentals of legal research and writing. This course covers the use of primary and secondary source materials to research legal questions. It examines different types of legal documents and provides training in legal analysis. The course also includes principles and techniques of legal writing and their application to legal correspondence and documents as well as the role of the paralegal in legal research and writing. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 102 and Business 220 and 223.



Credit Courses (A-Z)

#### **BUSINESS 155**

#### Working in Warehousing Environment

Provides learners with an overview of the functional and structural composition of warehousing and distribution centers. Topics include product flow, warehousing processes, working safely in a warehousing environment, principles in running a business, workplace ethics and how employees affect the bottom line. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **BUSINESS 156**

#### Warehousing Workforce Skills

This course provides training in the workplace practices that contribute to success on the job. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **BUSINESS 158**

#### **Warehousing and Distribution Process**

This course provides learners with the knowledge and core skills associated with warehousing and distribution. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 155 and Business 156.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



#### BUSINESS 159

#### Warehousing Technology Skills

Warehousing technology skills are those practices important to working in a technical environment. This course covers the use of scanners and data applications along with the understanding of industrial controls and computers and automation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 155 and Business 156.

2 LECTURE HOURS. 2 CREDIT HOURS.

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# **BUSINESS 162**

#### **Representative Warehousing Skills**

This course discusses mathematical concepts used in Supply Chain Management (SCM) warehousing and distribution. It also focuses on powered material handling equipment and safety requirements. Warehousing simulations provide the opportunity to use new skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 155 and Business 156.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



#### **BUSINESS 164**

#### Warehousing and Distribution Cooperative

This course will enable students to use the skills they have learned in the other Warehousing and Distribution classes. This coop will also demonstrate their readiness for full time employment by working in a warehouse under close supervision. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 158 and Business 162.

2 LECTURE HOURS. 2 CREDIT HOURS.



# **BUSINESS 165**

#### Fundamentals of Supply Chain Management I

An overview of Supply Chain Management with a special emphasis on supply chain strategy and the management and improvement of the supply chain. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Business 155, 156, 158, 159, 162, 164 and Mathematics 118 or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### **BUSINESS 166**

#### **Fundamentals of Supply Chain Management II**

A continuation of Business 165, emphasizing demand planning, product design considerations, manufacturing planning and controls, and logistics. Writing assignments, appropriate to the discipline, are part of the course.

Prerequisite(s): Business 165 or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.

ОН

#### **BUSINESS 167**

### Fundamentals of Supply Chain Management III

This course examines the fundamental relationships among the activities that comprise supply chain management, including Customer Relationship Management (CRM), Supplier Relationship Management (SRM), and the integrated management relationship between customers and suppliers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Business 166 or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.

ОН

#### **BUSINESS 168**

#### Field Experience: Introduction to 21st Century Ground Transportation

An in-depth analysis of the functional and operational components that constitute ground transportation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Must be at least 21 years of age, possess a valid Illinois driver's license, maintain good driving record, ability to sit/stand for extended periods of time, obtain a Department of Transportation Medical Card, and pass all required State of Illinois exams.

#### 4 LECTURE HOURS AND 8 LAB HOURS. 8 CREDIT HOURS.



#### BUSINESS 176

#### **Records Management**

This course provides an introduction to the increasingly comprehensive field of records and information management. It emphasizes the principles and practices of effective records management for manual systems while offering practical information. Basic manual systems concepts needed for understanding retrieval methods are discussed and applied. Emphasis is placed upon control for ensuring that the records system achieves its stated goals. Students will also be introduced to the electronic file management system. Writing assignments, as appropriate to the discipline, are part of the course.



## **BUSINESS 177**

#### **Clerical Bookkeeping**

This is an applied course that prepares students for the functions of clerical bookkeeping duties within the accounting department of an organization. It focuses on the procedures of how to handle accounts receivables, accounts payables, sales and receipts, depreciation and inventory. Basic bank teller processes are introduced. Demonstrate the role of the bookkeeper as an agent along with internal control procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Business 176 or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS.

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#### **BUSINESS 178**

#### **Bookkeeping Computer Applications**

This is an applied bookkeeping course that prepares students for the functions of pre-accounting duties within the accounting department of an organization. It focuses on the responsibilities of a bookkeeper and will include learning how accounts are categorized via the elements of the accounting equation. Students will gain knowledge of the trial balance, end-of-period procedures and closing the books. A familiarity with key financial statements will be obtained. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 176 and 177, or concurrent enrollment in Business 176 and 177, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



# BUSINESS 180

#### **Fundamentals of Accounting**

This course emphasizes an understanding of basic accounting principles and other business concepts as they apply to the reporting of financial data and other economic events of a business enterprise. Emphasis is on recording, analyzing, and interpreting historical data and showing its effect on the business financially. Writing assignments, as appropriate to the discipline, the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### BUSINESS 181

#### **Financial Accounting**

This course presents accounting as an information system that produces summary financial statements, primarily for users external to a business or other enterprise. Students study the forms of business organization and the common transactions entered into by businesses. The emphasis is on understanding and applying basic accounting principles and other concepts that guide the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. How to analyze and interpret historical financial statements as well as the limitations of using these statements in making forward-looking business decisions are included. The primary content emphasis will be accounting for current assets and liabilities, long-term assets and liabilities, corporations, cash flow statements and financial statement analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Business 111 or Business 141 or Mathematics 98 or higher; or concurrent enrollment in Business 141; or placement test; or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/MAJOR: DA KK MX OH TR HW WR

#### BUSINESS 182

#### **Managerial Accounting**

This course presents accounting as a system of producing information for use in internally managing a business. The course emphasizes the identification, accumulation and interpretation of information for planning, controlling and evaluating the performance of the separate components of a business. Included is the identification and measurement of the costs of producing goods or services and how to analyze and control these costs. Decision models commonly used in making specific short-term and long-term business decisions are included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 181, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/MAJOR: DA KK MX OH TR HW WR

# BUSINESS 183

# **Payroll Accounting**

A comprehensive course that prepares students for the functions of payroll within an organization. Introduces principles, procedures, and terminology for business applications of payroll methods. Emphasizes federal and state payroll records and forms. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Business 178 or 181, or consent of Department Chairperson.* 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 203**

#### Introduction to Cost Accounting

General accounting principles applied to factory operations. Includes methods of finding costs of specific orders, lots and processes, and basis of allocating overhead expenses. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 181 or BUSINESS 182. 3 LECTURE HOURS. 3 CREDIT HOURS.

#### **BUSINESS 204**

#### **Computer Applications Intermediate Accounting**

Utilizes a computer to perform major accounting tasks such as recording entries, posting to ledgers, generation of trial balances and financial statements, as well as special reports, all encountered in Business 205. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Business 205.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### BUSINESS 205 Intermediate Accounting

Application of funds, analysis of working capital, investments, inventories, amortization and depreciation, and cost expirations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 182 and concurrent enrollment in Business 204.



Credit Courses (A-Z)

#### **BUSINESS 206**

#### Auditing

Includes external balance-sheet audits, recent developments in techniques of auditing cash, receivables, inventories, investments, fixed assets, and liabilities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 205 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

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#### **BUSINESS 207**

#### Intermediate Accounting II

Accounting for the rights of creditors and stockholders; principles of fund accounting; statement analysis; special problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 205.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 208**

#### **Federal Income Tax**

Study of the principles of the Internal Revenue Code, practical application of tax rules to the preparation of returns, application of accounting rules to tax matters. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 182 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### BUSINESS 211 Business Law I

Laws of business transactions, including contracts, agency, employment and partnerships, and study of the Uniform Commercial Code. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 212**

#### **Business Law II**

Continues study of laws covering corporations, negotiable instruments, sales, real estate, and bailments. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 214**

#### The Legal and Social Environment of Business

A study of the legal and social environment of business with emphasis on business ethics and corporate social responsibilities. Areas of concentration include governmental regulation of business, securities law, consumer protection law, labor law and employment law. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### BUSINESS 216 Entrepreneurship

Entrepreneurial skills, organization, promotion and management in self-employment or administration in occupations and organizations; research and discussions with successful owners and managers in the business community. Students receive practice in planning, decision-making and self-evaluation. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 219**

#### **Real Estate Law for the Paralegal**

This course is one of the requirements of the Paralegal AAS program. It introduces the fundamentals of real estate law, with the emphasis on Illinois law, and provides a basic understanding of the elements of the real estate industry. The course covers real property law, categories of ownership, legal descriptions, contracts, financial aspects, and special issues in real estate law. It examines the real estate transaction from the beginning of the process to the closing. It emphasizes the drafting of legal descriptions of property, preparing closing documentation and performing a title search. It also examines the role of the paralegal in a law office, financial institution, or title company. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 147 and BUSINESS 148.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

WR

#### **BUSINESS 220**

#### Criminal Law for the Paralegal

This course is one of the requirements of the Paralegal AAS program. It explores the Illinois and federal court systems as well as defines the categories of crime and the types of legal defenses. It introduces the concepts involved in criminal proceedings and explores the stages of criminal litigation from the arrest through post-trial procedures. It enables students to understand all procedural aspects of criminal cases and the role of the paralegal in aiding an attorney in trial preparation, the trial itself, and post-trial procedures and appeals. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course *Prerequisite(s): Grade of C or better in BUSINESS 147 and BUSINESS 148*.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 221**

#### Insurance

Preparation for the agents or brokers licensing examination. Includes life and casualty insurance, automobile, fire, health and accident, and worker compensation. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 222**

#### **Business Law for the Paralegal**

This course is one of the requirements of the Paralegal AAS Program/Plan 304. It provides students with an in-depth analysis of the law pertaining to types of business organizations, contract formation, resolution of contract disputes and the impact of the Uniform Commercial Code on traditional contract theory. The role of a corporate paralegal is covered as it relates to the business environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 147 and BUSINESS 148.

# **BUSINESS 223**

#### Tort Law

This course is one of the requirements of the Paralegal AAS Program/Plan 304. It examines the fundamental elements of tort law and the principles of tort litigation. It introduces the different categories of torts and focuses on the role of the paralegal in tort litigation from the point of view of both the plaintiff and the defendant. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 147 and BUSINESS 148.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BUSINESS 224

#### Wills, Trusts and Probate

This course is one of the requirements of the Paralegal AAS Program/plan 304. It covers both the theoretical and practical knowledge needed in the estate planning and probate processes. It covers wills, trusts, and estate administration. The course emphasizes the role of the paralegal in the drafting of estate planning documents and carrying out probate procedures. Emphasis is placed on applicable Illinois law and Federal tax laws. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 149, 219 and 222.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 225**

#### Legal Research and Writing II

This course is one of the requirements of the Paralegal AAS Program/Plan 304. It is a continuation of Legal Research and Writing I and provides a more in-depth, hands-on exploration of legal research, writing, and analysis. It provides additional experience in legal research, reasoning, analysis, and writing. This course continues to explore the various legal reference sources, both traditional and non-traditional. It continues to develop legal reasoning skills and strategies to analyze legal authority in case law. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 150.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

# WR

#### **BUSINESS 226-1**

#### Internship for the Paralegal

This course is the final requirement for the Paralegal AAS program. It is designed to enable students to combine classroom training with practical paralegal work experience through supervised on-the-job training in a public or private legal setting. The course covers legal ethics, law office management, interviewing, and job placement skills. Periodic seminars are held to discuss experiences, concerns, and topical questions. Students are required to write summaries of current law articles, keep a journal, and prepare a portfolio which will include a resume, letters of recommendation, and other pertinent materials. A minimum number of hours of on-site time are required for this course. Internship placement must be approved by the Program Coordinator. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Successful completion of all other Paralegal AAS Program requirements with a grade of C or better and consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

# **BUSINESS 227**

#### Elder Law

This course is an overview of legal issues that are increasingly relevant as the older population increases. It covers a variety of legal documents and the many legal situations which affect the elderly. It also covers topics such as asset management, estate planning, healthcare, personal planning and protection, resources of both public and private agencies and organizations, and the court systems. It examines the role of the paralegal in interacting with elderly clients as well as in using the various resources available in elder law. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 149, 219 and 222.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

WR

#### **BUSINESS 228**

#### **Environmental Law for the Paralegal**

This course examines the fundamental concepts of environmental law. It emphasizes both state and federal laws and regulations enacted to preserve and protect the environment. It covers the specific areas of air quality control, water quality control, toxic substance control, waste management, and hazardous releases. It also covers energy policy, natural resources, international environmental law, and current environmental issues. It focuses on the role of the paralegal in environmental law. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 219 and 222.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BUSINESS 229

#### **Immigration Law**

This course provides an overview of the federal immigration system and the concepts and procedures of immigration law for the paralegal. It examines immigration law and regulations as well as practical applications in immigration law including the naturalization process, visa procedures, and the right and obligations of aliens in the United States. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 219, 220, 222, and 223 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 230**

#### **E-Business Marketing**

Explores resources, knowledge, skills, practices and techniques necessary to conduct business online. Explores nature and impact of e-commerce on business and business operation, resources required and available, customer relationship management, ordering systems, end-to-end marketing and performance and control systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 111 or Computer Information Systems 120 or consent of Department Chairperson.



Credit Courses (A-Z)

# **BUSINESS 231**

## Marketing

Examines the functions and objectives of marketing. Includes flow of industrial and consumer goods through the marketing system, and the role of the consumer, the product, the market, the pricing policies, promotion and distribution methods. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 111.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 232**

#### **Fundamentals of International Business**

Analysis of problems stemming from the movement of goods, services, human resources, technology, finance, and ownership across national boundaries. Direct focus on the development of management skills in handling problems of multinational business. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 111, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 236**

#### Advertising

Study of basic functions, principles, and techniques of advertising, including the role of advertising in the marketing system. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: HW

#### **BUSINESS 237**

#### Selling

Factors of successful selling of goods or ideas; buying motives, sales psychology, customer approach, and sales techniques. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 238**

#### Legal Ethics for the Paralegal

This course is an elective in the Paralegal AAS Program/Plan 304. It provides students with an overview of ethical considerations arising in the paralegal profession. This course discusses the regulation and discipline of attorneys and paralegals, issues related to confidentiality and conflicts of interest, unauthorized practice of law and other ethical issues that pertain particularly to paralegals. Students will discuss general ethical considerations and will work directly with the Illinois Rules of Professional Conduct. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 147 and 148, or consent of Department Chairperson

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **BUSINESS 239**

#### **Business Organizations and Agency Law**

This course is an elective in the Paralegal AAS Program/Plan 304. It provides students with an overview of the formation and operation of business enterprises, exposes students to types of business organizations and to the law surrounding principal/agent relationships. Student will learn about sole proprietorships, general and limited partnerships, limited liability companies and corporations. The role of a corporate paralegal is covered as it relates to the benefits and disadvantages of each type of entity as well as the formation, dissolution and recordkeeping for each of these entities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 222 or consent of Department Chairperson **3 LECTURE HOURS. 3 CREDIT HOURS.** 

WR

# **BUSINESS 240**

**Computers in the Law Office** 

This course is an elective in the Paralegal AAS Program/Plan 304 and can be taken in lieu of the internship requirement. A general introduction to the use of computer software programs in the modern law office. Office organization, legal terminology, fees and billing procedures, e-filing, scheduling and calendaring, preparation and maintenance of case files, preparation of law office forms, and an introduction and survey of a variety of legal specific software and legal web resources are involved in this course. Students will develop a greater appreciation for computers by learning how computers can help paralegals complete tasks and assignments. This course includes hands on computer exercise using professional software programs and web resources used in the law office by paralegals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 223, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BUSINESS 241

#### Introduction to Finance

Surveys methods of financing business enterprises and their relationships to personal and company investment policies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 181, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 242**

#### **Financial Markets and Institutions**

This course examines the different financial institutions and financial markets. Topics include interest rate determinants, monetary policy, federal reserve system, financial intermediaries, and regulatory agencies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 241 or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS,



# **BUSINESS 243**

#### **Fundamentals of Investments**

This course examines the institutional investment process. Emphasis on common stocks and other financial securities traded over the financial exchanges. Topics include risks, returns, portfolio selection, and portfolio performance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 241 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

# BUSINESS 244

#### **Personal Finance**

Personal investment programs including the sources and uses of investment information. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 250**

#### **Computerized Accounting Systems**

Computerized Accounting focuses on exposing students to various computerized accounting systems and how these systems accomplish the goals of accounting information system of a business entity. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 181, or Computer Information Systems 120 or equivalent, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 251**

# **Public Relations**

This course examines the organization's process of communication to the public. Topics include multicultural community relations, consumer relations, and crisis management. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 231 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 252**

#### **Product Planning and Development**

This course examines the factors influencing product planning and development. Topics include new product strategies, idea generation, perceptual mapping, and product position. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 231 or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS,



#### **BUSINESS 253**

#### **Consumer Behavior**

This course examines the decision-making process of the consumer. Topics include perception, motivation, lifestyles, and attitudes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 231 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 254**

#### Integrated Marketing Communications

This course examines the purposes of objectives integrated marketing communications. Emphasis is on communication strategy formulation and development via various advertising and promotional tools, such as personal selling, public relations, trade promotions, and consumer promotions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 231 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 255**

#### **Corporate Finance**

This course examines the various factors that influence the financial decisions of corporations. Topics include risk and return analysis, capital budgeting, capital structure, dividend policies, and mergers and acquisitions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 241 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 257** Principles of Retailing

Functions of retailing, including current trends and problems. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS, 3 CREDIT HOURS,



#### **BUSINESS 258**

#### **Small Business**

Organization and operation of small-scale retail, trading, service, or manufacturing business. Problems of location, financing, labor, accounting and production, taxes, and insurance. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BUSINESS 269

#### **Principles of Management**

Analysis of major functions and principles of management; emphasis on supervisory and operating levels of management; theories, policy-making, effective communications and art of decision-making. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 111, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 270**

#### Office Management

Application of management principles to planning, organization, and controlling of office work. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 271**

#### **Human Resources Management**

Employment techniques, wages and hours, job evaluation, training, employee ratings, collective bargaining, employment counseling and collateral benefits, such as pensions and fringe benefits. Writing assignments, as appropriate to the discipline, are part of the course.



Credit Courses (A-Z)

#### **BUSINESS 272**

#### Sales Management

Planning of sales efforts; management of sales and services; human resources, and controlling sales operations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 111 and 237, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 273**

#### **Organizational Behavior**

This course examines the theories and concepts related to human behavior in organizations. Topics include individual behavior, group behavior, and organizational structure and culture. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Business 269.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# **BUSINESS 274**

#### **Industrial Management**

Characteristics of industrial enterprise, problems of materials procurement, plant organization and layout; labor relations and human resources policies, efficiency techniques, automation, and production development. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 278**

#### **Compensation and Benefits Administration**

This course examines the design and implementation of an organization's compensation systems. Topics include job analysis, base pay structure, incentives, and performance measurements. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 269 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 279**

#### **Human Resources Planning and Staffing**

This course examines the functions and objectives of human resources planning and staffing. Includes staffing models and strategies, recruitment, selection, employment and retention. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 271 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **BUSINESS 281**

#### **Office Procedures for Office Administrative Assistants**

Records management, editorial duties, correspondence and reports, and work simplification procedures. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 284**

#### **Business Communications**

Study of communication (including motivation, perception, language, distortions, organizations, listening) and its role in the administrative process; patterns of mis-communications (such as by-passing, deception, generalizations, association, labeling) are examined for better understanding of communication process and to improve organizational environment; consideration given to psychological impact of various communications media. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# BUSINESS 285

# Real Estate Principles

Preparation for state real estate examination. Includes real property, deeds, agreements of sale, mortgages, financing, valuation and appraisal, leases and closing statements. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 111, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

# DA

#### BUSINESS 287

#### **Real Estate Practice and Procedure**

Sales contracts, closing statements, finance, insurance and the Illinois real estate brokers and salesmans laws. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 111, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



# **BUSINESS 288**

#### **Real Estate Appraisal**

Functions and purposes of appraisals, including neighborhood and area trends, site valuation, building cost estimates and depreciation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 285 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



# BUSINESS 289

#### **Real Estate Management**

Property management, including merchandising, residential space, managing furnished buildings, single family units, office buildings, commercial properties, and cooperative apartments, setting store rentals, maintenance problems, and operation of a management office. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 285 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **BUSINESS 291**

#### Leadership

This course examines the process by which an individual exerts influence over other individuals and inspires, motivates, and directs their activities to help achieve group or organizational goals. Topics include power and influence, participative leadership, leadership theories, and managerial traits and skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 269 or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS,

#### BUSINESS 292 Employment Law

This course examines the legal environment relationship, procedure and discrimination. Topics include selection, termination, affirmative action, sexual harassment, and unions and collective bargaining. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in BUSINESS 269 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

WR

#### **BUSINESS AND COMMERCIAL TECHNOLOGY TC1**

#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 100 Public Passenger Vehicle Training/Taxi

This course is designed to prepare individuals to take the licensure examination required by the City of Chicago to become unrestricted public chauffeurs. The course rules and regulations governing the operations of a public chauffeur in Chicago, focuses on street law, judicial procedures, and mastery of geography through routing exercises. This course also covers cultural sensitivity and diversity, customer service, accessibility training and taxi Access Program (TAP) and safety of the passenger as well as the driver. Students must also take a four-hour Intra-City bus tour. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

Prerequisite(s): Student must be 21 years of age and have Illinois Driver License. If convicted of felony, five years from the date of sentencing must have passed.

#### 6 LECTURE HOURS. 6 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 503 Business Writing

Fundamentals of business correspondence; includes composing business letters, memorandum and reports using a personal computer. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 506-1 Basic Keyboarding II

12 LAB HOURS. 4 CREDIT HOURS.



BUSINESS AND COMMERCIAL TECHNOLOGY TC1 506-2 Basic Keyboarding II

6 LAB HOURS. 2 CREDIT HOURS.



BUSINESS AND COMMERCIAL TECHNOLOGY TC1 506-3 Basic Keyboarding II

3 LAB HOURS. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 507 Records Management

Upon completion, students will be able to prepare business documents for indexing, coding, storing and retrieving. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



# BUSINESS AND COMMERCIAL TECHNOLOGY TC1 508 Practicum

Planned and supervised career field experience relating to a student's occupational program is emphasized. Placement will introduce students to the real world of work in the field of Information Processing. Writing assignments, as appropriate to the discipline, are part of the course.

5-20 LAB HOURS. 1-2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 512-1 Basic Keyboarding III

Development of greater control and speed; typing of short simple business letters; and word division. Writing assignments, as appropriate to the discipline, are part of the course.

3-12 LAB HOURS. 4 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 512-2 Basic Keyboarding III

Development of greater control and speed; typing of short simple business letters; and word division. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 512-3 Basic Keyboarding III

Development of greater control and speed; typing of short simple business letters; and word division. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



#### **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 521** Business Grammar Review

3-4 LECTURE HOURS. 3-4 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 522-1 Business English and Communication

This course provides skills in oral and written communication with emphasis on a variety of typical business subject matters. Writing assignments, as appropriate to the discipline, are part of the course.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 522-2 Business English and Communication

The mechanics of English communications skills with emphasis on reading comprehension, the development of written composition of original correspondence and communication. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 522-3 Business English and Communication

The mechanics of English communications skills with emphasis on reading comprehension, the development of written composition of original correspondence and communication. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 523 Basic Keyboarding IV

This course provides skill development in solving problems in letter arrangements and planning and typing non-letter communications and documents,. Emphasis will, also, be given to greater speed and control. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 524 Basic Keyboarding V

This course provides refinement of typing skills and knowledge with emphasis on production of business correspondence. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



#### **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 525** Introduction Office Systems

The major components of a computer system, terminology, operating system command structure, and related utilities will be integrated throughout the course. Basic operations, including directories, cataloging, and comparing files are covered. Advanced concepts such as sub directories, folders, and text editing are discussed. Writing assignments, as appropriate to the disciplines, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



# **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 526** Introduction Personal Computers

Overview course that ensures students a firm foundation in computer applications. Students will be introduced to operating systems, word processing, database, spreadsheet, desktop publishing, multimedia and telecommunications. This course will also explain the difference between working on a network or a stand-alone environment. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 527 Medical Typing I

Upon completion of this course, the trainees will develop greater typing control and speed. He/she will also develop skills in the typing of medical forms, medical reports, and case histories. Trainees will be able to type a medical report, a medical form and a case history into mailable copy with 30 minutes and type 55 gross words per minute with no more than 3 errors. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 528 Microcomputer Applications

Microcomputer Applications is a course designed to provide students with skills in word processing, electronic spreadsheet and database management. Students will also learn the basic functions of the disk operating system (DOS). Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 12 LAB HOURS. 5 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 529 Introduction to Word Processing

Fundamentals of word processing: equipment, terminology, creating, editing, and printing business documents on a dedicated word processor. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 532-1 Basic Computer Technology

Course provides students with an overview of the basic computer concepts and terminology, the internet and the Microsoft Office applications. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 533 Medical Terminology I

This course provides skills in defining and correctly spelling medical terms related to pediatrics, cardiology, pathology, radiology, endocrinology, dermatology and gastroenterology. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 534 Medical Terminology II

This course provides skills in defining and correctly spelling medical terms relating to mental health, neurology, orthopedics, ophthalmology, gynecology, obstetrics and general surgery. Writing assignments, as appropriate to the discipline, are part of the course.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 535 Medical Transcription I

This course provides skills in the operations of the dictation/transcription machines and produce quality communications for transmittal in a hospital or doctor's office; apply principles of machine dictation and transcription and machine operations procedures, transcribing techniques and procedures. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 536 Medical Transcription II

This course provides skills in the refinement of transcription t produce quality communications for transmittal in a hospital or doctor's office. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 538 Business Mathematics I

Business Mathematics I

Provides skills developing sufficient knowledge of the basic mathematical fundamentals such as addition, subtraction, multiplication, division, decimals, percentages, interest and discounts. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 539 Business Mathematics II

This course will develop occupational proficiency in performing business applications such as discounting, percentages, interest, decimals, and payroll. Writing assignments, as appropriate to the discipline, are part of the course.

2-3 LECTURE HOURS. 2-3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 540 Business Mathematics III

Review basic math principles and application of occupational proficiency in performing business applications such as discounting, payrolls, decimals, interest, and percentages; includes basic accounting principles as applied to the office environment. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 542 Secretarial Accounting I

Upon completion of this course, trainees will have a knowledge of the basic fundamentals and principles of accounting elements and business transactions. Trainees will be able to identify and describe the fundamental accounting equation, types and functions of various source documents, and perform basic accounting tasks accurately. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



## BUSINESS AND COMMERCIAL TECHNOLOGY TC1 543 Keyboard Microcomputers I

Course will teach students to operate the keyboard by touch and begin development of speed and accuracy levels and also includes formatting of basic documents. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 544 Keyboard Microcomputers II

Course will provide training in keyboarding, skill building and document formatting. Students will use word processing software as a tool to build keyboarding speed and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 545 Keyboard Microcomputers III

Advanced document formatting and skill building on the ten-key number pad are included. Students will use decision-making skills to evaluate document formats and mailability. Apply written communication skill and demonstrating quality and efficiency document production are emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 546 Career Development I

Interpersonal skills training to prepare individuals for the world of work with emphasis on community resources, career development, professional grooming, and office etiquette. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 547 Career Development II

Develop students' employability plans: enhances their understanding of attitudes, behavior, perceptions, and motivations, and how they affect getting and keeping a job. They will have experienced the work environment through short-term internships; and through the development of problem-solving skills, worked toward minimizing the obstacles that would jeopardize their program completion. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 548 Life Skills III

Designed to increase students' success in occupational training by assisting students in obtaining skills necessary to reach his/her career objectives. Topics include time-planning, test-taking, critical thinking, communication skills, study techniques, question-asking skills, library use and personal issues such as substance abuse and household budgeting that face many students. Writing assignments, as appropriate to the discipline, are part of the course.

1-2 LECTURE HOURS. 1-2 CREDIT HOURS.



#### **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 550**

#### **Word Processing Application**

Development of techniques and skills for word processing software. Features covered include: editing, retrieval, merging and storage of documents, systems layout, design management processes and implementation of programs. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 551 Spreadsheet Applications

Introduce students to spreadsheet concepts and applications. Students will format spreadsheets using effective designs and principles: entering common spreadsheet formulas, sorting data, using graphic flash chart functions and importing spreadsheet files. This course is designed to teach students to think analytically, manipulate information and use the computer as productivity tool. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 2 CREDIT HOURS.



# **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 552**

**Database Applications** 

Course will provide training in the concepts of database management and the use of relational database software for business applications. Students will create and manipulate data files and format output as documents and reports. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 2 CREDIT HOURS.



# **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 553**

#### **Desktop Publishing Apps**

Course covers the fundamental concepts of desktop publishing techniques, usage of microcomputers to create high-quality documents, principle page layouts, publications, text and graphic documents, brochures, newsletters, business cards, publications, terminology and applications. Students will create a variety of documents and demonstrate proficiency in software functions. Writing assignments, as appropriate to the discipline, are part of the course.

#### 6 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 556 Medical Office Procedures I

Upon completion of this course, trainees will have acquired the knowledge and skills to handle specific responsibilities and problems faced by secretaries in a doctor's office or hospital. They will be able to organize and store medical documents, properly receive patients and visitors, communicate via telephone and telegraph, handling incoming and outgoing mail and establish and maintain doctor's appointments and schedules accurately. Writing assignments, as appropriate to the discipline, are part of the course.

#### 2 LECTURE HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 557 Medical Office Procedure II

Upon completion of this course, trainees will have acquired the knowledge and skills to handle specific responsibilities and problems faced by secretaries in a doctor's office or hospital. They will be able to organize and store medical documents, properly receive patients and visitors, communicate via telephone and telegraph, handling incoming and outgoing mail and establish and maintain doctor's appointments and schedules accurately. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 568 Language Skills I

Course provides comprehensive coverage of the fundamentals of English as applied to business applications. The students will develop a solid foundation of English grammar essential for successful communication. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 569 Language Skills II

This course will teach advanced grammar, punctuation and composition skills. Students will prepare business correspondence, deliver oral presentations and use electronic writing tools. Students will develop sensitivity in communicating with a diverse workforce. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 570 Legal Typing

This course provides skills development in the typing of legal documents and forms. It also provides skill development in typing for greater speed and control. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 571 Legal Transcriptions I

This course provides skills in the operations of the dictation/transcription machines and the production of quality communications for transmittal in a legal office. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 572 Legal Transcriptions II

This course provides skills in the refinement of transcription skills to produce quality communications for transmittal in a legal office. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 573 Legal Terminology I

This course provides skills in defining and correctly spelling legal terms and expressions related to courts, litigations, civil actions, criminal law, probates, property and contracts. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.

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#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 574 Legal Terminology II

This course provides skills in defining and correctly spelling legal terms and common legal expressions related to leases, domestic relations, commercial paper, bankruptcy, equity, partnerships and corporations. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



## **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 575**

#### **Legal Office Procedures**

This course provides knowledge of routine office responsibilities and problems faced by secretaries in a law office; filing procedures, telephone and telegraph communications, mail handling and research. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 576 Business Law

This course provides knowledge of the legal environment in which a business operates to enhance the trainee's performance as an office worker. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 3 LAB HOURS. 4 CREDIT HOURS.



#### **BUSINESS AND COMMERCIAL TECHNOLOGY TC1 711** Baking Sanitation and Safety

Instruction in regulations, rules, safety and sanitation in the baking/pastry field. Writing assignments, as appropriate to the discipline, are part of the course. **6 LAB HOURS. 2 CREDIT HOURS.** 



# BUSINESS AND COMMERCIAL TECHNOLOGY TC1 713

# **Baking Science Application**

Application of instruction in use of ingredients and formulas. Instruction and handson experience in producing basic, Continental and ethnic breads and rolls. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 715 Pastry, Cake Decorating and Desserts

Instruction in principles and procedures of producing desserts, pastry decorations, cakes and pulled sugar. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 727 Banquet Sanitation and Safety

Instruction in advanced safety and sanitation procedures in relation to equipment and hand tools. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 729 Culinary Artwork

Instruction in basic and advanced culinary artwork. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 731 Basic Culinary Techniques I

Instruction in basic principles and procedures of preparation of meat, fish, and poultry, baking, sauteing, frying, roasting and poaching. Writing assignments, as appropriate to the discipline, are part of the course.

9 LAB HOURS. 3 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 732 Basic Culinary Technique II

Instruction in basic principles and procedures of French style cooking, breakfast cookery, basic principles and procedures or work stations, use of fats and oils in cooking. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 733 Basic Culinary Technique III

Instruction in basic principles in the preparation of appetizers, soups, salads. Writing assignments, as appropriate to the discipline, are part of the course. 2 LECTURE HOURS AND 6 LAB HOURS, 4 CREDIT HOURS.



#### BUSINESS AND COMMERCIAL TECHNOLOGY TC1 734 Basic Culinary Technique IV

Instruction in basic principles in the preparation of breakfast items, sandwiches, and beverages. Writing assignments, as appropriate to the discipline, are part of the course.

12 LAB HOURS. 4 CREDIT HOURS.



# CAD TECHNOLOGY

#### CAD TECHNOLOGY 130 CAD Technology I

Application of pictorial techniques used in preparation of industrial illustrations; study of oblique, axonometric, perspective and exploded views; methods and techniques of shading, commercial media and reproduction processes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in ENGR 100 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



Credit Courses (A-Z)

#### **CAD TECHNOLOGY 170**

# CAD Technology II

Introduction to programming techniques using computer-aided design (CAD) systems; use of basic command structures, keyboard and menu tablets; text dimensioning and pen and layer selection. Writing assignments, as appropriate to the discipline, are part of the course. ARC-1 time.

Prerequisite(s): Grade of C or better in ENGR 100, or 110, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



# CAD TECHNOLOGY 171

# CAD Technology III

Intermediate programming techniques using computer-aided design (CAD) systems; techniques of file handling, archiving and plotting; drawing manipulations of translation and rotation to prepare for CAD system operation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Architecture 170, or CAD TEC 170, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



# CAD TECHNOLOGY

#### **CAD Technology IV** Advanced planning concepts and designs using computer-aided design systems;

techniques of file handling, archiving, and plotting; drawing manipulations of translation and rotation to prepare for CAD system operation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CAD TEC 171, or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



# **CE BUSINESS MANAGEMENT**

#### CE BUSINESS MANAGEMENT 101 Introduction to Microcomputers

Students will receive an uncomplicated approach to understanding hardware, an introduction to Windows Operating Systems, a discussion of networks, an overview of 2 applications packages, a word processor and a spreadsheet; and an introduction to the Internet. Students required to purchase text.

1 LECTURE HOUR. 1 CREDIT HOUR.



# **CE BUSINESS MANAGEMENT 102**

#### Keyboarding Skills I: Alpha

This course lays the foundation, or refreshes the knowledge for students to become touch typists. The course is taught on a computer keyboard using a word processing program. Upon completion, students will be able to complete basic keyboarding skills. Speed Goal: 14 wpm. Accuracy Goal: Five (5) errors or less on a one minute timed typing test. Homework required.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 139 Introduction to the Internet

Take a ride on the Information Superhighway. Find out what people are talking about. Students will learn basic concepts and terminology about the Internet and its history and how to connect to the Internet and evaluate an Internet Service Provider. Students will get hands-on experience visiting a variety of Web sites and learning how to find information using portals, search engines and directories.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 167 A+ Certification Exam Prep

Students will prepare to take the A+ certification exam through drills and case study examples. Effective test taking strategies will be explored.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### **CE BUSINESS MANAGEMENT 190**

Keyboarding ARC: 1 time.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 204 Keyboarding I

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 206 Excel I

1 LECTURE HOUR. 1 CREDIT HOUR.

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#### CE BUSINESS MANAGEMENT 230 Desktop Publishing I

This course will provide students with the opportunity to learn to use basic features of desktop publishing software to create all types of publications: flyers, brochures, newsletters, and advertisements. Included in the course will be basic page layout and design principles and integrating text and graphics to create attractive business publications. This course will be taught with industry standard software. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



# CE BUSINESS MANAGEMENT 231 Implem Mx WIN2K Prof/Server

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



# CE BUSINESS MANAGEMENT (0502) 232

# Administering Microsoft Windows NT

This course provides students with the knowledge and skills necessary to perform post-installation and day-to-day administration tasks in a single-domain or multipledomain Microsoft Windows NT based network. It also provides students with the prerequisite knowledge and skill required for other Microsoft supporting courses. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



#### CE BUSINESS MANAGEMENT (0502) 233 Implem/Admin. MS WIN2K DIR SVCS

This course provides the core foundation for support Microsoft Windows NT operating system version 4.0. The goal of the course is to provide support professionals with the skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Windows NT 4.0. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



#### CE BUSINESS MANAGEMENT (0502) 234 Designing MS WIN2K Networking Services

This course provides a training solution for support professionals working in a Microsoft Windows NT Server 4.0 based enterprise environment. The goal of the course is for support professionals to be able to design, implement, and support the Windows NT Server network operating system in a multiple-domain enterprise environment. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



# CE BUSINESS MANAGEMENT (0502) 235

Managing MS WIN2K Networking Environment This course is a self-paced training kit designed to prepare Microsoft Certified

Professional candidates to successfully complete the Networking Essentials exam. It is also designed to provide students with the background necessary to understand the local area networking information in Microsoft courses on workstations and networking. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



# CE BUSINESS MANAGEMENT (0502) 236

Admin. MS SQL Server 2K Database

This course provides students with the knowledge and skills required to set up, configure, use and support Transmission Control Protocol/Internet Protocol (TCP/ IP) on Microsoft Windows NT operating systems version 4.0. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



# **CE BUSINESS MANAGEMENT 238**

#### **Illinois Real Estate Broker Pre-License**

This course was designed to meet the 75-hour licensing curriculum requirements for real estate brokers as set forth by the State of Illinois. Topics included are Illinois license law, agency, state and federal law, relationships with employing brokers, working with sellers and buyers, real property, fair housing, ownership, contracts, real estate valuation, environmental issues, construction, real estate closings, advertising, property management, and commercial real estate. The course mixes presentation of facts, concepts, and key terms with real-life scenarios to illustrate the topics being taught, as well as assessment of such. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): COMPASS Test Scores: Reading Score: 72 or higher. Mathematics Score: Algebra scores of 49 or higher

6 LECTURE HOURS. 6 CREDIT HOURS.



#### **CE BUSINESS MANAGEMENT 239**

#### Illinois Broker Applied Real Estate Principles-Interactive

This course includes student participation in five three-hour interactive lessons with an instructor to apply the knowledge learned in the Illinois Real Estate Broker Pre-License topics course. Fifteen (15) hours must be classroom or interactive media required by the Illinois Department of Financial and Professional Regulation to complete the 90-hours of Real Estate training to be allowed to test for the Real Estate Broker's exam. Each interactive lesson begins with a review of principles, concepts, requirements for compliance and violations, summary of best practices, and/or applicable laws/licensee requirements. Students will also participate in a variety of interactive activities (i.e., quizzes, content review exercises, class and small group discussion) where they will apply their knowledge to a variety of real-world scenarios designed to provide valuable analysis and decision-making experience. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Successful completion of CE BSMT 238-IL Real Estate Broker Pre-Licensure course.

1 LECTURE HOUR. 1 CREDIT HOUR.

#### CE BUSINESS MANAGEMENT 240 Introduction to PC Hardware

This course begins the introduction to PC technology as identified by the objectives in CompTIA's A+ certification. The class provides the framework for understanding how a computer works from the inside out. It is the perfect start into PC hardware and operating systems.

1 LECTURE HOUR. 1 CREDIT HOUR.



# **CE BUSINESS MANAGEMENT 241**

#### PC Repair and Troubleshooting

Students will learn about PC hardware and system maintenance procedures. Topics include a detailed look at hardware components, power supply, upgrades, networking, maintenance and troubleshooting. In hands-on exercises, students will assign configuration settings, upgrade systems, configure SCSI devices, install printers and monitors, remove and replace components, and troubleshoot POST errors.

#### 2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



# **CE BUSINESS MANAGEMENT 242**

#### PC Operating Systems

Students will learn installation procedures, dealing with legacy systems, creating and using emergency boot diskettes and managing printers and other devices. Other topics include networking, communication protocols, Internet access and troubleshooting. In hands-on exercises, students will install Windows operating systems, manage Windows devices, use the FDISK utility, perform backups, manage system files, configure networks, configure Internet access, and troubleshoot operating system errors.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



#### **CE BUSINESS MANAGEMENT 243**

#### **Network + Certification**

This course is designed to prepare students for the 2002 ComTIAs Network + Exam N10-002. Earning the Network + Certification means that students has the knowledge needed to use and maintain a wide range of network technologies. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 1 LAB HOUR. 3 CREDIT HOURS.



#### **CE BUSINESS MANAGEMENT 244**

#### Legal Research

Learn the fundamentals of legal research, including the tools necessary to find legal citations and court rulings. You will use tools and techniques for writing arguments and counterarguments to defend a legal position. You may be expected to visit a local law library. A textbook may be required. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 245 Legal Writing

Writing is an essential skill for paralegals. In this course, you will learn the fundamentals of legal analysis and legal reasoning. You will also learn about case analysis, statutory analysis and legal reasoning. You will also learn about case analysis, statutory analysis, drafting letters and other correspondence, and writing legal memoranda. A textbook may be required. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

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# **CE BUSINESS MANAGEMENT 246**

#### Estates, Wills and Trust

Many legal assistants are now working in the probate area. You'll learn the essential requirements of drafting wills and trusts, the tax laws that govern this area, the procedures involved in the administration of an estate, and the responsibilities delegated to paralegals in this specialty area. No textbook is required. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### **CE BUSINESS MANAGEMENT 247**

#### **Criminal Law and Procedures**

The need for legal assistants in the area of criminal justice is increasing rapidly. This course is designed to teach students the law and legal procedures, the laws governing arrest, search and seizure, and the role of the paralegal in criminal law. a textbook may be required. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### **CE BUSINESS MANAGEMENT 248**

#### **Civil Procedure and Litigation**

Learn about the litigation process in this course. You will learn how to prepare pleadings and motions, how and where to file pleadings, investigative and discovery techniques used in trial preparation, and the role of the paralegal in civil procedures and litigation. Writing assignments, as appropriate to the discipline, are part of the course.

#### 1 LECTURE HOUR. 1 CREDIT HOUR.



# **CE BUSINESS MANAGEMENT 249**

# **Business Law**

Students will learn about proprietorships, partnerships, and corporations, determine which entity is better for particular purposes, know what to include in the articles of incorporation, and prepare documents needed to form a business entity. A textbook may be required. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 250 Contracts

Contracts are part of almost every attorney's practice. Learn how to analyze contracts, the laws that apply to contracts, what it takes to form a contract, how contracts can be enforced, remedies for breach of contract, and how to draft contracts. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

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# CE BUSINESS MANAGEMENT 251

Real Estate and Property Transfers Real estate specialists are in great demand, not only in law firms, but also in banks,

title companies, and brokerage. This course covers all aspects of real estate law, including reading property descriptions, the real estate closing process, preparing deeds and contracts, setting landlord-tenant disputes, and preparing leases. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

TR

#### CE BUSINESS MANAGEMENT 252 Family Law

Learn about the laws and procedures of the broad area of family law, which includes divorce, separation, and annulment; adoption and paternity; support and visitation; and juvenile proceedings. You will learn how to interview clients. Prepare pleadings, and research cases in this area. A textbook is required. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

TR

# CE BUSINESS MANAGEMENT 253

#### Paralegal Profession: Nature and Scope

Learn what a paralegal does on a day-to-day basis. You will learn about the role of professionalism and ethics, skills required, legal office terminology, and a basic overview of the law. You'll also learn career planning and job search strategies, and interview preparation. A textbook is required. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



# **CE BUSINESS MANAGEMENT 254**

# **Torts/Personal Injury**

This course covers intentional torts, negligence, and tort liability. The area of torts includes everything from simple battery to products liability and medical malpractice. Special attention will be given to personal injury law, including assessing claims and damages, adjudication or personal injury cases, and making out-of-court settlements. Writing assignments, as appropriate to the discipline, are part of the course.



# **CE BUSINESS MANAGEMENT 255**

#### **Paralegal Overview**

Come to this one-day seminar to learn about career opportunities for paralegals, and about Truman College's paralegal training program. The paralegal field can be exciting and rewarding. Paralegals work in a variety of settings including corporations, private law firms, consumer organizations, courts, and government agencies. According to the Bureau of labor Statistics, employment in the field is expected to grow faster than average through 2010, with many employers seeking paralegals who are multi-lingual. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR. 0.5 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 256 Dreamweaver

Use Adobe Dreamweaver CS4 to quickly create web pages and web sites without hand-coding. You will learn to use Dreamweaver's excellent tools for Cascading Style Sheets (CSS), templates, libraries, JavaScript behaviors, image manipulation, Flash insertion, and forms development. With emphasis on Dreamweaver's tableless design and CSS tools, you will make your own six-to ten-page website. HTML/XHTML and CSS skills are required for this course. Students who have not taken HTML/XHTML at Truman College must contact the instructor for permission.



#### CE BUSINESS MANAGEMENT 257 HTML/XHTML

Learn HTML/XHTML, the fundamental language used in website creation. While many applications generate HTML/XHTML code (including Dreamweaver, knowing how to manipulate underlying code is vital for any web developer. After learning basic HTML/XHTML coding, you will be introduced to advanced topics including tables, cascading style sheets, Javascript and PHP. You will also learn file management in a cross platform environment. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



# CE BUSINESS MANAGEMENT 258

#### Flash

Learn Macromedia Flash, which is an outstanding software tool for creating multimedia animation with vector graphics. This animation format has transformed the web into a colorful, moving environment and an authoring program. In this course, you will explore the fundamentals of flash and produce your own interactive compositions for the web. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### CE BUSINESS MANAGEMENT 259 Photoshop

Adobe Photoshop CS4 is the industry standard photographic manipulations used by photographers, visual artist and graphic design professionals. It provides powerful tools for photo retouching, image resizing, collage, drawing, painting, text manipulations, page layout and optimization for the web. This class focuses on creating bitmap graphics to be used in print for web pages or imported into Macromedia Flash to create complete web animations. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE BUSINESS MANAGEMENT 260 Illustrator

Adobe Illustrator CS4 is the powerful graphic program used by visual artists and graphic design professionals. It provides unique illustration tools for drawing, painting, text manipulations, page layout, title design and optimization for the web. This class focuses on creating compact, ventor graphics to be used in web pages or exported to Flash to create complex web animation. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

TR

# **CE HEALTH**

# CE HEALTH 102

#### **Phlebotomy Technician** This program prepares professionals to collect blood specimens for laboratory analysis. Students will become familiar with all aspects of blood collection and will develop comprehensive skills to perform venipunctures completely and safely. Classroom and lab work included terminology, anatomy, and physiology, blood collection procedures, specimen hands-on practice, and training in skills and

techniques to perform puncture methods. Note: As part of the learning objectives for this course, you will take on the role of patient and technician. There is not outside externship rotation included with this program.

Prerequisite(s): Students must be 18 years of age. A high school diploma or GED certificate is required for national certification.

12 LECTURE HOURS. 12 CREDIT HOURS



# CE HEALTH 107

#### **Community Health Care**

Individuals working in the healthcare profession come in contact with many different people. This course is designed to give you techniques in verbal and written communication, including phone skills.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE HEALTH 108 Anatomy/Physiology

This course will assist students choosing healthcare careers to develop a foundation in understanding the function and components of the human body. Students working towards becoming a Certified Phlebotomy Technician may use this towards meeting the requirements for the certification exam. **7** sessions.

2 LECTURE HOURS. 2 CREDIT HOURS.



(wR)

#### CE HEALTH 110 Introduction Phlebotomy/EKG

If you are interested in a career in phlebotomy, this introductory course is a great place to start. Learn the procedures for venipuncture, skin puncture, other blood drawing techniques, EKGs and vital signs. The course includes seven sessions of theory and lab including practice on manikins and fellow students. Upon successful completion, students will receive a certificate for 28 hours of phlebotomy and EKG training. Required book available Wright bookstore. **7 sessions. ARC-99 times.** 



Credit Courses (A-Z)

# CE HEALTH 115

#### **Dental Assisting I**

You will learn office procedures, inventory, dental charting and the basics of chairside assisting. You will learn to work on behalf of the patient as well as the dentist in helping to assure a high level of professional excellence in oral healthcare delivery.

#### **1 LECTURE HOUR. 1 CREDIT HOUR.**



# CE HEALTH 116

**Dental Assisting II** 

This class will introduce students to dentition, cavity classification, instruments, oral surgery procedures and techniques as well as basic tray setups, aseptic practices and restoration methods.

1 LECTURE HOUR. 1 CREDIT HOUR.



# CE HEALTH 117

**Dental Assisting III** 

Clinical Practice.

Prerequisite(s): Dental Assistant, Part Two, Communications for Healthcare, CPR, Law and Ethics for Medical Career.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE HEALTH 139

#### **Fundamentals of Phlebotomy**

This course will prepare students in the basic concepts of phlebotomy as well as safety in the workplace. Successful completion of this course is a requirement to continue in the phlebotomy certificate program. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# CE HEALTH 140

# **Phlebotomy Practice and Procedure**

This course will instruct the Phlebotomy student on how to draw blood from manikins as well as fellow students in preparation for clinical practice. Successful completion of this course is a requirement to continue in the phlebotomy certificate program. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



# **CE HEALTH 141**

#### **Phlebotomy Clinical Practice**

This hands on phlebotomy course offers students the opportunity and experience needed to become proficient phlebotomists utilizing the skills learned in prerequisite phlebotomy courses. Students must have their own transportation to the clinical sites. Successful completion of Phlebotomy Clinical Practice will meet the 120 hour clinical requirement for taking the exam to become a Certified Phlebotomy Technician through the American Society of Clinical Pathologists (ASCP).

#### 9 LECTURE HOURS. 9 CREDIT HOURS.



# CE HEALTH 150

# Homemaker/Home Health Aide

This course provides students with the necessary skills mandated by the national Homecare Council including all elements of person care, vital signs, body mechanics, safety measures, resident's rights, infection control, communication, and observation. Exploration of geriatric and Alzheimer's patients is also included. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 4.5 CREDIT HOURS.



# CE HEALTH 151

Personal Trainer Preparation

This personal trainer preparation is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming. Writing assignments, as appropriate to the discipline, are part of the course.

1.5 LECTURE HOURS. 1.5 CREDIT HOURS.

MX

#### CE HEALTH 152 Emergency (911) Dispatch

This course will provide basic fundamental tools to help students seek and maintain a salaried Emergency Services Telecommunication position with any public safety (police, fire, EMS or standalone dispatch center) agency in the country. Students will be exposed to samples of state of the art computer equipment commonly used in many dispatch centers nationwide, learn call-taking and dispatch skills and hear real 911 calls and police and fire radio traffic. Students will learn terminology and radio etiquette and be introduced to the basics about state and national law enforcement computer database. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS. 2.5 CREDIT HOURS.



#### CE HEALTH 153 Medical Terminology

Basic medical vocabulary for allied health professionals and others with a minimal background in anatomy and physiology; includes study of the human body systems. Student will learn terminology for common pathologies (diseases) and diagnostic tests, with a focus on proper pronunciation, usage and spelling. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



# CE HEALTH 154

# Human Anatomy and Physiology

A basic understanding of the anatomy and physiology of the various body systems is the sound foundation upon which all healthcare careers are built, including those providing direct patient care and those in support services such as medical billing. This course examines basic anatomy (structure) and physiology (function). Abnormal function (pathology) will be discussed briefly as well as the most common diagnostic tests used to identify it. Writing assignments, as appropriate to the discipline, are part of the course.



#### CE HEALTH 155

#### **Commercial Government and Billing/Insurance**

Preparation for administrative positions in the healthcare field. The course is designed to introduce students to the different types of health insurance available. The course reviews government and commercial insurance types. Writing assignments, as appropriate to the discipline, are part of the course.

# 1 LECTURE HOUR. 1 CREDIT HOUR.



#### CE HEALTH 158

#### **EKG** Technician

Students will learn the skills needed to become an EKG/cardiovascular technician in this comprehensive course. Students will learn the anatomy and physiology of the heart, medical disease processes, medical terminology, medical ethics, and legal aspects of patient contacts. Students will also be introduced to the associated areas of laboratory assisting, and electrocardiography. The hands-on practice students receive will help in preparing for the national exam administered through (NCCT) National Center for Competency Training. Writing assignments, as appropriate to the discipline, are part of the course.

#### 2 LECTURE HOURS. 2 CREDIT HOURS.



#### CE HEALTH 170

#### Introduction to Computers in Healthcare

This course will focus on effective modeling and analysis of complicated healthcare related processes through the use of computer usage and simulation techniques. Students will learn the day-to-day usage of the computer in the healthcare setting and will also develop skills to evaluate alternative courses of actions for purposes of improving the efficiency of the healthcare system. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

# CE HEALTH 171

#### Pharmacy I

This course will take students through the history of pharmacy as well as the current roles and responsibilities of the pharmacy technician today. The student will explore different career opportunities and paths throughout the field of pharmacy. The introductory course will develop the basic terminology of pharmacy as well as the basic calculations used. The student will be introduced to the laws and ethnics that the foundation of pharmacy is built on and the patients have come to expect of the profession. The course will include lecture and role playing activities. As part of the pharmacy law, students will be expected to obtain an IL State Technician License. Writing assignments, as appropriate to the discipline, are part of the course.





#### CE HEALTH 172 Pharmacy II

This course will include building on the skills developed in Pharmacy I by continuing with pharmacy terminology and calculations; will also have a "handson" compounding section as well as an introduction to inventory management and third party billing. The student will continue learning via lecture and hands on compounding activities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE HLTH 171 and concurrent enrollment in CE HLTH 173. 2 LECTURE HOURS. 2 CREDIT HOURS.



# CE HEALTH 173

## Pharmacy III

This course is a clinical experience in a working pharmacy. The student is assigned a preceptor and given worksheets and activities to complete while in the "live" pharmacy environment. The preceptor will be licensed pharmacist at the location they are assigned. The student will complete activities around workflow, inventory, patient "pick-up", cash management, third party billing, prescription production, and computer order processing along with patient record keeping. The experience will have a concentration on customer service skills and confidentiality of patient records. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE HLTH 171 and concurrent enrollment in CE HLTH 172 and consent of Department Chairperson.

0.5 LECTURE HOUR AND 12 LAB HOURS. 4.5 CREDIT HOURS.



# CE HOME ECONOMICS

# CE HOME ECONOMICS 103 Food Service Sanitation/Recertification

Prepare yourself to be certified or recertified by the City of Chicago and the State of Illinois in Food Service Sanitation, including training and certifying food vendors for outdoor festivals. Food protection will be emphasized through sanitation training. **ARC: 3 times.** 

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### CE HOME ECONOMICS 104

#### **Developing Your Family Child Care Business**

Developing Your Family Child Care Business is a facilitated interactive business development program to help individuals launch or grow successful family child care businesses. This twelve-session program includes: Identify market advantages/disadvantages related to the business location; develop promotional strategies; begin the process of pricing services and understanding finances and setting policies for the child care center. Writing assignments, as appropriate to the discipline, are part of the course.

1.5 LECTURE HOURS. 1.5 CREDIT HOURS.

DA

#### **CE TRADE/INDUSTRIAL/TRANSPORTATION**

#### CE TRADE/INDUSTRIAL/TRANSPORTATION 106 Road Driving

Designed for individuals with little or no commercial driving experience, this course provides the theoretical foundation to become a commercial driver. Students will learn the regulations that governs each classification and why commercial vehicles are identified by classifications. Through this course, students will be eligible to obtain their commercial driver's license. Upon successful completion, students will receive a certificate of completion and a class A Commercial driver's license. Writing assignments, as appropriate to the discipline, are part of the course.



# **CE TRADE/INDUSTRIAL/TRANSPORTATION 113**

# Limousine/Residential Chauffeur Training

This course is a ONE DAY CLASS that must be successfully completed before applying to the City of Chicago to take the restricted chauffeur's license examination. This examination is required before anyone can drive a livery or medical carrier in Chicago. This workshop covers the rules and regulations governing chauffeurs and the geography and important locations in the city. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

1 LECTURE HOUR. 1 CREDIT HOUR.



# **CE TRADE/INDUSTRIAL/TRANSPORTATION 114**

#### **Defensive Driving/Attitudinal**

This course is designed for licensed chauffeurs who have a record of rule and regulations violations and newly licensed chauffeurs who have not been driving in the U.S. for at least three years. This one day course has been deemed mandatory by the Chicago Department of Business Affairs and Customer Protection. The topics would include a review of violated rules and regulations, cultural sensitivity training, anger management, and conflict resolution training, and behavior modification approach to effective customer service. The student would end with a sense of how his earnings can be seriously affected by not being knowledgeable, courteous and safe driver. This course also reviews the Illinois Rules of the Road handbook and prepares the inexperienced chauffeur driver for the road. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

1 LECTURE HOUR. 1 CREDIT HOUR.

#### **CE TRADE/INDUSTRIAL/TRANSPORTATION 114-4**

#### **Defensive Driving/Attitudinal**

This course underscores the importance of alertness, anticipation, courtesy, hazard recognition and other critical factors that prevent crashes. The teaching techniques used in this course involve ten-minute video sessions that help examine specific high-risk choices (such as keeping a short following distance) and take an inside look at what really happens to drivers and passengers in a vehicle crash. **ARC: 3 times.** 

1 CREDIT HOUR.



ОН

#### CE TRADE/INDUSTRIAL/TRANSPORTATION 115 Commercial Vehicle Training: Class B

The purpose of this course is to provide students with the necessary training required to become a safe commercial motor vehicle operator. Students receive training in class B commercial vehicles. Upon completion of this course students will receive a certificate of completion and Class B Commercial driver's license.

1.5 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 116 Class B: Passenger Endorsement

The purpose of this course is to provide students with the necessary training required to safely transport passengers in commercial in motor vehicles. Students receive training in pre-trip and post-trip inspection, loading and unloading, use of brake-door interlocks, passenger transportation and prohibited practices. Upon completion of this course students will receive a certificate of completion and a Passenger Endorsement on their Commercial driver's license.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 117 Class B: School Bus Endorsement

The purpose of this course is to provide students with the necessary training required to become safe school bus drivers. Training will include pre-trip and post-trip inspection, loading and unloading, transporting students with special needs, proper securement of child safety seats, evacuation, railroad crossings and school bus operations. Upon completion of this course, students will receive a certificate of completion and a School Bus and Passenger Endorsement on their Commercial driver's license.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

ОН

#### CE TRADE/INDUSTRIAL/TRANSPORTATION 118 Forklift Operator

The Forklift Operator course prepares students for the workplace. Upon completion of this course, students will have a working knowledge of the basic need and use of the lift truck. Students will also be able to safely inspect and operate the lift truck. This course includes theory and practical training.

1.5 LECTURE HOURS AND 1 LAB HOUR. 2 CREDIT HOURS.

ОН

#### CE TRADE/INDUSTRIAL/TRANSPORTATION 119 Unarmed Security Guard

Intensive instruction in the technical aspects of private security employment. Emphasis is on legal rules, security techniques and processes, life safety, and public relations. Successful completion satisfies the 40-hour basic training requirement for unarmed private security certification under Illinois revised statutes. This course is in compliance with the Illinois Public Act 93-0438 effective August 5, 2003 and the Private Detective, Private Alarm, Private Security and Locksmith Act of 2004. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **CE TRADE/INDUSTRIAL/TRANSPORTATION 120** Workplace Safety/Industrial Safety and Health

This course covers basic instruction including OSHA requirements and other concerns (MSDS, confined space, lock out/tag out, zero energy state, hazardous materials, storage of flammable materials, storage of fuel gas and high pressure gas cylinders, portable powered tool safety, record keeping, training, employer enforcement of safety regulations, right to know, etc.) Writing assignments, as appropriate to the discipline, are part of the course.



# CE TRADE/INDUSTRIAL/TRANSPORTATION 121

#### Print Reading and Measurement

This course provides an introduction to reading and interpreting machine shop symbols, shop prints and working drawings used in metal working industry. Focuses on dimension, shape, fabrication and assembly. Applies basic mathematics to the solution of print and performance problems. Students will learn how to use basic measuring instruments and gages like caliper, micrometer, height gage, and pin gages. Writing assignments, as appropriate to the discipline, are part of the course.



# CE TRADE/INDUSTRIAL/TRANSPORTATION 122

#### **Basic Machining Processes**

This course is an introduction to machine tools and processes associated with the machine trade. Topics include industrial safety and environmental protection, basic hand tools, benchwork, layout, power saw operations, drilling, milling, and lathe operations. Upon completion, students should be able to safely perform the basic operations of drilling, sawing, milling and turning. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 123 Basic CNC Machining

The course is designed to enable students to become familiar with CNC machinery as it applies to the operator. The information presented will include introduction to CNC set-up, tooling, operations and trouble shooting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 122.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 124 Product Design Using Mastercam

This course covers MASTERCAM software to create part geometry and assign toolpath to the geometry. By translating using a post-processor, CNC programs can be automatically generated and communicated to the machine tools in Daley's Manufacturing Lab. Both 2-D and 3D toolpaths are used to make parts using machines with various controllers. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



# **CE TRADE/INDUSTRIAL/TRANSPORTATION 125**

#### **NIMS** Credentialing

This course provides an overall view of National Metalworking Standard Institutes (NIMS) credentialing process and how to find resources to prepare for credentialing examination. Students will achieve NIMS credential after passing online examination administered by NIMS. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 122.

0.5 LECTURE HOUR. 0.5 CREDIT HOUR.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 126 Machining Processing I

This course is an introduction to machine tools and processes associated with the machine trade. Topics include industrial safety and environmental protection, basic hand tools, shop floor math, job planning, benchwork, layout, power saw operations, drilling machines, milling machines, and print readings. Upon completion, students should be able to perform the basic operations of measuring, layout, drilling, sawing, and milling. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 127 Machining Processes II

This course further develops students' knowledge, skills and abilities in machining building on the fundamental principles covered in Machining Process I. Students manufacture projects that require precision layout, set-up, machining, and inspection. These projects require students to perform various operations on engine lathes, and surface grinders. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 126.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 128 Computer Numerical Control Fundamentals

The course is designed to enable students to become familiar with CNC machinery as it applies to the operator. The information presented will include introduction to CNC set-up, tooling, operation, and trouble shooting. Writing assignments, as appropriate, are the part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 126 and 127 or with the consent of the instructor.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.

# DA

#### **CE TRADE/INDUSTRIAL/TRANSPORTATION 129** CNC Milling Operations and Programming

This course introduces the programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Various projects will strengthen the proper use, programming, troubleshooting of this equipment in the manufacturing setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 128.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 130 CNC Turning Operations and Programming

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Various projects will strengthen the proper use, programming and troubleshooting of this equipment in the manufacturing setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 129.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



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# **CE TRADE/INDUSTRIAL/TRANSPORTATION 131**

#### Machine Shop Mathematics I

This course is designed to provide student with the basic principles of Mathematics with applications that relate to typical machine shop problems. Topics to be studied include the review of fractions, decimals, measurements, rations, proportions, and percent. An introduction to algebra, measuring systems, precision and accuracy as they relate to machining will also be included in the course. Electronic calculators are required for this course. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 132 Introduction to Welding Principles

This course is designed to introduce students the principles of basic welding techniques, welding shop measurement, layout work, Mig and Tig welding operations and various equipment used in welding shops. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 133 Intermediate Welding

Course is designed to continue development of knowledge and skills in Arc, MIG and TIG welding processes. Students will complete various common joints in mild steel in the horizontal and vertical positions using single and multi-pass welds as assigned. Welding safety will be emphasized. Students will gain practice in metrology, weld inspection and an introduction to weld testing. Writing assignments,

as appropriate to the discipline, are part of the course.

Prerequisite(s): CE Trade/Industrial/Transportation 132 with a grade of C or better or consent of Department Chairperson.

**3 LECTURE HOURS AND 4 LAB HOURS. 3 CREDIT HOURS.** 



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 134 Blueprint Reading for Welders

This course prepares student to interpret blueprints and apply the information contained therein in the welding and fabrication trades. Emphasis is placed on the relationship between the two-dimensional drawing and the actual three-dimensional object. Basic and complex welding symbols will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# CE TRADE/INDUSTRIAL/TRANSPORTATION 135 Advanced Welding

Course is designed to advance development of knowledge and skills in Arc, MIG and TIG welding processes. Arc and MIG students will complete various common joints in the vertical and overhead positions with mild steel using single and multipass welds as assigned. TIG welders will weld mild steel, aluminum and stainless steel in the horizontal and vertical positions. Welding safety will be emphasized. Students will continue practice in metrology, weld inspection and interpretation welding drawings and symbols. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): CE Trade/Industrial/Transportation 133 with a grade of C or better or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 136 Basic Horticulture

This course will introduce students to basic concepts of Horticulture with emphasis on basic anatomy, terminology, and functions of plants and professions surrounding culture and use of ornamental plants. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.

DA

#### CE TRADE/INDUSTRIAL/TRANSPORTATION 137 Managing Urban Green Space

This subject will provide an understanding of how to manage urban green spaces. The study policy, planning and process issues, community consultation, structures, systems and contractual relationships, landscape documentation, project planning and implementation, life-cycle analysis of landscape elements, urban vegetation planning, implementation and maintenance, sustainability concepts and examples. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.

DA

#### CE TRADE/INDUSTRIAL/TRANSPORTATION 138 Horticultural Plant Science

This course covers the structure and function of plants and plant tissues, cell physiology, energy transformations, metabolism, photosynthesis, plant nutrition, water and nutrient uptake and transport and whole plant physiology. By the conclusion of this course students should be able to demonstrate their proficiency and the integration of these processes in the physiology of plant growth. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 139 Urban Horticultural Floral

This course will provide students with a working knowledge of plant science, anatomy, morphology, physiology, taxonomy, reproduction and genetics as they relate to horticultural ornamental plants. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 140 Greenhouse Crop Production

This course will cover information on the production of greenhouse crops and the cultural practices required for growth. Subjects including seeding, watering, fertilization, containers, growing dedias, temperature control, insect and disease control will be covered. Greenhouse plants and pot crops will be grown throughout the semester. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



# CE TRADE/INDUSTRIAL/TRANSPORTATION 141

#### Soil Fertility and Assessment

This course introduces students to the ways that farmers and gardeners develop and maintain soil fertility in sustainable farming systems. Subjects include introduction to the tools, techniques and rational behind soil cultivation, soil analysis, soil physical properties, components, nutrient deficiency, soil chemistry, and soil fertility. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 142 Management of Plant and Animal Invasion

This course will provide insight and learning of the invasions that are natural ecological phenomena. Dispersing individuals encounter suitable habitat, establish, spread and evolve. In this way, species have radiated outwards from their origins, colonized distant offshore islands, and species have spread in response to changes in climate. Human-induced invasions of plants, animals and diseases in modern times have dramatically altered the scales of time and distance over which invasions take place. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



# CE TRADE/INDUSTRIAL/TRANSPORTATION 143

#### **Sustainable Farming Practices**

This course is designated for those interested in or presently working in the area of grounds care and maintenance. Areas of study including pruning, fertilizing, pesticide use, digging and replacement of landscape plants, general turf care and maintenance of equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136, 140 and 141. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.

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#### CE TRADE/INDUSTRIAL/TRANSPORTATION 144 Practicum/Internship

This Practicum/Internship is designed for those who have successfully completed the course work for all courses associated with the Sustainable Urban Horticulture program. This Practicum/Internship will allow students to experience the full vision and mission of the program. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CE Trade/Industrial/Transportation 136, 137, 138, 139, 140, 141, 142, 143 and consent of Department Chairperson.

10 LAB HOURS. 5 CREDIT HOURS.



#### **CE TRADE/INDUSTRIAL/TRANSPORTATION 145**

#### **Class C Driver Training**

This course provides in-depth coverage of the laws, rules, and regulations that are applicable to the operation of both commercial and non-commercial motor vehicles. Students gain knowledge and skills in the area of vehicle inspection, pre-testing, skill operations and defensive driving techniques.

Prerequisite(s): Must be at least 21 years of age, have a valid driver's license, able to obtain a Department of Transportation Medical Card, able to physically operate the vehicle and maintain a negative drug/alcohol testing results.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 147 Passenger Driver Practice

This course is designed for individuals with little or no commercial driving experience; it provides the theoretical foundation to become a safe operator of a Class B Commercial Motor Vehicle. Through this course, students will obtain their commercial driver license learner's permit. Students receive training in class B commercial vehicles, they will learn the regulations that governs each classification and why vehicles are identified by specific designations. Upon successful completion of the course, students will receive a Certificate of Completion and a Class B Commercial driver's license. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Prospective student must be 21 years of age or older, possess a valid Illinois driver's license, a good driving record (demonstrated through a court ordered motor vehicle report) and meet all Department of Transportation medical requirements.

8 LAB HOURS. 4 CREDIT HOURS.

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#### CE TRADE/INDUSTRIAL/TRANSPORTATION 148 Commercial Driving Training Practice

This course is designed as the continuation of the theory course. This course provides students with behind-the-wheel experience leading them to present their driver's exam and obtaining the Illinois Commercial driver's license. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Student must be 21 years of age or older, possess a valid driver's license, a good driving record (demonstrated thru a court ordered motor vehicle report) and pass a physical exam. Students must have passed CE 013 0337 and obtain a CDL learner's permit.

8 LAB HOURS. 4 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 149 Commercial Driver Refresher Training

This course is designed for individuals with commercial driving experience. This course provides drivers with a review of the current rules, regulations and requirements to which all commercial drivers must adhere. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 338 Commercial Driver Training Theory

Designed for individuals with little or no commercial driving experience, this course provides the theoretical foundation to become a commercial driver. Through this course, students will obtain their commercial driver's learners permit. Writing assignments, as appropriate to the discipline, are part of the course.

6 LECTURE HOURS. 6 CREDIT HOURS.



#### CE TRADE/INDUSTRIAL/TRANSPORTATION 338 Passenger Driver Theory

This course is designed for individuals with little or no commercial driving experience and provides the theoretical foundation to become a commercial driver. Through this course, students will obtain their commercial driver's license learner's permit. Writing assignments, as appropriate to the discipline, are part of the course.



Credit Courses (A-Z)

# CHEMISTRY

#### **CHEMISTRY 203**

#### **General Chemistry II**

Topics include equilibrium, acid-base equilibria, solubility equilibria, kinetics, thermodynamics, electrochemistry, coordination compounds, nuclear chemistry and descriptive topics in organic chemistry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 201, or consent of Department Chairperson. 4 LECTURE HOURS AND 4 LAB HOURS. 5 CREDIT HOURS.

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IAI/MAJOR: KK MX OH TR HW WR

#### **CHEMISTRY 204**

#### **Quantitative Analysis**

Gravimetric, volumetric, and calorimetric procedures; basic techniques of quantitative measurement applied to the determination of percentage composition, equilibrium constants and the reliability of data. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 203.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



#### CHEMISTRY 205 Organic Chemistry I

Fundamentals of organic chemistry, orbital and structural theory, aliphatic and aromatic hydrocarbons, alkyl halides, structural isomerism, introduction to functional groups, nomenclature, stereochemistry, reaction mechanisms, resonance theory, and spectroscopy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 203 or consent of Department Chairperson.

4 LECTURE HOURS AND 4 LAB HOURS. 6 CREDIT HOURS.

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IAI/MAJOR: DA KK MX OH TR HW WR

#### CHEMISTRY 207 Organic Chemistry II

Continuation of study of organic chemistry: alcohols, aldehydes and ketones, carboxylic acids, functional derivatives of carboxylic acids, O, N and S containing compounds, heterocyclic compounds, spectroscopy; laboratory emphasis on organic synthesis and spectroscopic analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 205, or consent of Department Chairperson.

4 LECTURE HOURS AND 4 LAB HOURS. 6 CREDIT HOURS.

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# IAI/MAJOR: DA KK MX OH TR HW WR

#### **CHEMISTRY 212**

#### Survey of Organic and Biochemistry

Survey of organic chemistry, including nomenclature and reactions of major functional groups essential to biochemistry. An introduction to the structure and function of biomolecules, and the metabolism of proteins, lipids, and carbohydrates. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 201 or consent of Department Chairperson. 3 LECTURE HOURS AND 3 LAB HOURS. 4 CREDIT HOURS.



#### **CHEMISTRY 217**

# Introduction to Instrumental Analysis

Use of modern optical and electrical methods in chemical analysis: filter photometers; visible, ultraviolet and infrared spectrophotometer; gas chromatographs, radioactive counters, and pH meters; potentiometers; refractometers; polarimeters; and polarographs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 201 and 205, or consent of Department Chairperson.

#### 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **CHEMISTRY 219**

#### **Chemistry for Education I: Matter and Structure**

This course is designed to provide educators with a fundamental understanding of matters, its structure and its changes from both a qualitative and quantitative perspective. Physical properties, chemical interactions, bond, and the atomic structure of matter will be explored and mapped to state science education standards. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Student must be a certified middle-grade teacher or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### CHEMISTRY 295

#### Independent Research in Chemistry I

Original laboratory research supervised by a faculty member, either on campus or off-campus. A well-defined academic goal must be outlined by the instructor and students. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

1-2 LECTURE HOURS AND 5-20 LAB HOURS. 2-6 CREDIT HOURS.



# **CHEMISTRY 296**

#### Independent Research in Chemistry II

Original laboratory research supervised by a faculty member, either on campus or off-campus. A well-defined academic goal must be outlined by the instructor and students. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 295 or consent of Department Chairperson.

1-2 LECTURE HOURS AND 5-20 LAB HOURS. 2-6 CREDIT HOURS.



#### **CHEMISTRY 297**

#### Independent Research in Chemistry III

Original laboratory research supervised by a faculty member, either on campus or off-campus. A well-defined academic goal must be outlined by the instructor and students. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 296 or consent of Department Chairperson. 1-2 LECTURE HOURS AND 5-20 LAB HOURS. 2-6 CREDIT HOURS.



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#### **CHEMISTRY 298**

#### Independent Research in Chemistry IV

Original laboratory research supervised by a faculty member, either on campus or off-campus. A well-defined academic goal must be outlined by the instructor and students. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 297 or consent of Department Chairperson. 1-2 LECTURE HOURS AND 5-20 LAB HOURS, 2-6 CREDIT HOURS,



#### **CHEMISTRY 299**

#### Independent Research in Chemistry V

Original laboratory research supervised by a faculty member, either on campus or off-campus. A well-defined academic goal must be outlined by the instructor and students. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 298 or consent of Department Chairperson.

1-2 LECTURE HOURS AND 10-20 LAB HOURS. 3-6 CREDIT HOURS.



# **CHILD DEVELOPMENT**

#### CHILD DEVELOPMENT 100 Critical Readings in Child Development

Prepares students to read critically in the field of human development. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# **CHILD DEVELOPMENT 101**

#### Human Growth and Development I

This course provides a foundation in theory and principles of human development, from conception to early adolescence, including an in-depth study of physical, social, emotional, cognitive, and language development, including children's play. Five hours observing young children, ranging in age from birth to age eight, are required. Writing assignments and oral presentations as appropriate to the discipline are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**4 LECTURE HOURS. 4 CREDIT HOURS.** 



#### **CHILD DEVELOPMENT 102**

#### Human Growth and Development II

Continuation of Child Development 101. Emphasizes adolescence through late adulthood. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### CHILD DEVELOPMENT 107 Health Safety and Nutrition

This introductory course explores practices that promote good nutrition, dental, physical and mental health, as well as the safety of infants, toddlers, pre-school, and school-aged children in group settings. The course has a dual emphasis on the health, safety, and nutrition of young children and adult students. Health, lifestyle, preventative health, community resources, and emergency response procedures are examined. This course introduces cultural beliefs that influence health, safety, and nutrition. It explores ethical and legal responsibilities of adults in protecting the emotional and physical well-being of young children. Five observation hours observing young children in an early childhood education setting are required. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **CHILD DEVELOPMENT 109**

#### Language and Literacy Development in Early Childhood

This course explores the developmental process of language and literacy development from birth to age eight. In addition, the course explores the relationship between language, literacy, and all other domains of development. Planning for a variety of developmentally appropriate activities that support language and literacy development are explored, as well as an examination of the role the environment plays and how to design a language and literacy-rich environment for young children. Bilingualism, multiculturalism, and the role of culture in language and literacy development and early childhood education are explored. Eight hours observing young children in an early childhood education setting are required for this course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 and Child Development 120 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **CHILD DEVELOPMENT 120**

#### Introduction to Early Childhood Education Group Care

This introductory course is designed to familiarize students with the historic roots and philosophical foundations of early childhood care and education. The course includes an exploration of different types of early childhood programs, the role of the early childhood professional, and an examination of students' personal qualities in relationship to expectations of the field. The course will include an examination of the role of culture in child development and anti-biased practices in early childhood education. Finally, the course defines the profession and explores the profession's Code of Ethical Conduct. Five hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### CHILD DEVELOPMENT 130 Special Topics in Child Development

Study of a single topic in child development that would enhance students' ability to support children and the families of young children. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable</u> <u>Course:</u> Not more than an accumulated four credit hours will be counted toward graduation. <u>ARC: 4 times.</u>

Prerequisite(s): Grade of C or better in Child Development 101 or consent of Department Chairperson.



#### **CHILD DEVELOPMENT 141**

#### **Activity Programming**

Recreational and creative activities as factors which change patterns of behavior in children. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



# **CHILD DEVELOPMENT 142**

#### Methods and Materials for Infant Toddler Care

Acquaints current and prospective caregivers with the ways infant and toddlers play and learn at specific developmental levels. Through use of observations students will plan to meet needs of individual children in a group setting. Emphasis will be on creating a context for responsive and respectful care giving in a group setting. Writing assignments and observations, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **CHILD DEVELOPMENT 143**

# Science and Mathematics for Young Children

This course explores the relationship of play to the content areas of science and math in early childhood. Planning for a variety of developmentally appropriate experiences in mathematics and scientific inquiry are explored as well as an examination of the role of the early childhood environment in supporting development. The course emphasizes the study of cognitive theory as well as observation and documentation of science and math learning in diverse early childhood settings. The course includes student reflections of their own attitudes about science and math. Eight hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 and Child Development 120, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **CHILD DEVELOPMENT 144**

#### **School-Age Activity Programming**

Designed to introduce students to a basic understanding of the benefits of play and recreation for school-age children. Develops the basic skills to plan and implement developmentally appropriate activities for school-age children and adolescents. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



# **CHILD DEVELOPMENT 149**

#### **Creative Activities for Young Children**

This introductory course explores the importance of creative activities in the early childhood curriculum and the relationship of creativity to physical, cognitive, language, social, and emotional development. Planning for a variety of developmentally appropriate, creative experiences that allow young children to play with art, music, movement, literature, and drama is explored as well as an examination of the role of the early childhood environment on creative expression. This course emphasizes the importance of the process of creative expression and provides diverse, creative experiences for adult students so they may understand the arts as a means of communicating ideas, feelings, and cultural expression. Eight hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **CHILD DEVELOPMENT 201**

#### Observation, Assessment, and Documentation to Support Young Children and Families

This course provides an examination of developmentally appropriate techniques for observing, documenting, and assessing the development of young children in order to inform curriculum planning and promote positive guidance strategies. The course emphasizes a strengths-based approach to assessment that includes building partnerships with families and professional colleagues. Self-reflection is a major component of the course as well as the examination of bias in the observation and assessment of young children from diverse backgrounds. Fifteen hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101, 107, 120, and 149 or consent of Department Chairperson. Grade of C or better or Concurrent enrollment in Child Development 109, 143 or Child Development 262 is recommended.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### CHILD DEVELOPMENT 205 Development of Exceptional Child

Study of children whose development does not follow normal patterns; problems of identification, diagnosis and potential assessment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# CHILD DEVELOPMENT 225

#### Supervision of Exceptional Child

Techniques in handling and communicating with the deaf, blind, developmentally delayed, and physically challenged child. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 205.



### CHILD DEVELOPMENT 228

### **Principles of Child Care Practice**

Role of the child care worker in group/residential settings; primary objectives and goals; re-examination of child rearing responsibilities in light of treatment goals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101. 3 LECTURE HOURS. 3 CREDIT HOURS.

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### **CHILD DEVELOPMENT 229**

#### **Practicum in Residential Child Care**

Twenty hours per week of professional, and supervised training in a Child Care Treatment Program; includes two-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 102, 201, and 228, and Social Services 212, or consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



### CHILD DEVELOPMENT 230

### Introduction to Early Intervention

Introduction to the field of early intervention and the role of the Early Intervention Associate. Includes units covering the background and current status of the field, an overview of the characteristics of normal versus at-risk and special needs population of infants and toddlers, and theoretical models and strategies of early intervention, including Individualized Family Service (IFS) planning and team building. Writing assignments, as appropriate to the discipline, area a part of the course.

Prerequisite(s): Grade of C or better in English 101, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **CHILD DEVELOPMENT 248**

#### Principles and Practice of Infant and Toddler Care

Acquaints prospective teachers and care-givers of infants and toddlers with theory and practice of care and education of very young children in group setting. Writing assignments, as appropriate to the discipline, are part of the course.

 $\label{eq:precession} \textit{Prerequisite(s): Grade of C or better in Child Development 101 or consent of Department Chairperson.}$ 

#### 4 LECTURE HOURS. 4 CREDIT HOURS.



### **CHILD DEVELOPMENT 258**

#### **Principles and Practices of Pre-School Education**

This class provides opportunities to plan developmentally appropriate play-based activities that support all developmental domains including physical, cognitive, language, and socioemotional development with an emphasis on designing appropriate early childhood environments that address the needs of all children. The course emphasizes the process of becoming a professional including the implementation of the NAEYC Code of Ethical Conduct and other professional guidelines as well as fostering an early childhood environment that is conducive to respecting diversity. Students will write/revise their philosophy of early care and education. Thirty hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101, 107, 109, 120 and 143, or consent of Department Chair. Grade of C or better in Child Development 201 or Child Development 262 recommended.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### CHILD DEVELOPMENT 259 Practicum in Pre-School

In this capstone course, students spend a minimum of 250 student teaching hours in an early childhood program under the direct mentorship of an on-site supervisor, field supervision by the course instructor, and weekly 2-hour seminar discussions with classmates. Students are expected to apply what they have learned in all previous CD courses including: engaging in positive interactions with young children, planning developmentally appropriate activities, and using appropriate assessment techniques. Students will uphold professional and ethical guidelines. Students will design and revise a Child Development Portfolio compiled of artifacts from their previous coursework and other professional experiences. An emphasis is placed on the NAEYC Standards for Professional Preparation. Two-hundred and fifty student teaching hours with on-site supervision in an early childhood education setting are required for this course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101,107,109,120,143,149,201,258 and 262. To register for this course, all students must have Consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



### **CHILD DEVELOPMENT 260**

#### Administration and Supervision of Pre-School Centers

For those with experience as teachers or directors of nursery schools or day care centers who wishes to improve their skills in administration and supervision. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



### CHILD DEVELOPMENT 262

### **Child, Family and Community Relations**

This course explores the importance of building positive relationships between young children, their families, the community, and the early childhood setting. It examines issues of diversity, multiculturalism, and anti-bias approaches in working with young children, their families, and the community as well as current policies, and practices that influence families. This course promotes self-reflection, cross cultural communication, and sensitivity to cultural, linguistic, and ability diversity. Five hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 and Child Development 120, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **CHILD DEVELOPMENT 268**

#### **Principles and Practice of School Age Programs**

Designed to introduce students to the principles of developmentally appropriate practice in a school-age group setting. The student will review the developmental stages of school-age children in the social, emotional, physical and cognitive domains and apply these principles to the design and establishment of the physical environment, program scheduling, health and safety practices and group management. Techniques for parental involvement will be included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or grade of C or better in English 100, and Grade of C or better in Child Development 101.



### **CHILD DEVELOPMENT 269**

#### Practicum in School Age Child Care

In this capstone course, students spend a minimum of 250 student teaching hours in a school-age program under the direct mentorship of an on-site supervisor, field supervision by the course instructor, and weekly 2-hour seminar discussions with classmates. Students are expected to apply what they have learned in all previous CD courses including: engaging in positive interactions with young children, planning developmentally appropriate activities, and using appropriate assessment techniques. Students will uphold professional and ethical guidelines. Students will design and revise a Child Development Portfolio compiled of artifacts from their previous coursework and other professional experiences. An emphasis is placed on the NAEYC Standards for Professional Preparation. Two-hundred and fifty student teaching hours with on-site supervision in an early childhood education setting are required for this course. Writing assignments and oral presentations. as appropriate to the discipline, are part of the course. Students spend 20 hours a week, under supervision, working with children in a school-child care setting; 17 weeks with a 2 hour seminar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



### **CHILD DEVELOPMENT 299**

#### Special Topics in Child Development/Early Childhood

Special topics in Child Development or Early Childhood Education will be discussed. New developments such as the latest brain research and its implication to working with your children will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

1-4 LECTURE HOURS. 1-4 CREDIT HOURS.



### CHINESE

#### CHINESE 101 Introduction to Chinese

This course introduces the basic elements of Mandarin Chinese that will enable students to develop communicative language skills, basic conversational skills, as well as grammar and vocabulary knowledge in Chinese. Intensive drills on sound and tones, vocabulary, and sentence patterns in meaningful contexts will be used in order for students to communicate appropriately and accurately in authentic contexts. The course will introduce students to the diverse culture, history, and social etiquette of China. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson 4 LECTURE HOURS. 4 CREDIT HOURS.



#### CHINESE 102 Chinese II

This course is designed for students who have acquired some oral proficiency, but lack formal training and literacy. It teaches more advanced grammar rules while reviewing basic ones. Students will learn how to use a bilingual dictionary to assist their reading of essays and short stories. They will learn to write notes, letters, and paragraphs. The course will introduce students to the diverse culture, history, and social etiquette of China. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chinese 101, or consent of Department Chairperson. 4 LECTURE HOURS, 4 CREDIT HOURS.



### CHINESE 103 Chinese III

This course is designed for students who have acquired some oral proficiency and basic grammar rules of Mandarin Chinese. It will emphasize four skills: speaking, listening, reading, and writing in culturally authentic situations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chinese 102 or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



### CHINESE 198

### **Study Abroad: Intensive**

To prepare students to fully participate in and benefit from the Study Abroad program in China, this course will cover two major aspects of the Chinese studies: culture and language. Students will work collaboratively to discuss different topics about China and learn to speak conversational Chinese in an appropriate manner. Writing assignments as appropriate the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chinese 102 or higher and selection by Committee.

2 LECTURE HOURS. 2 CREDIT HOURS.

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### **CHINESE 199-A**

### Study Abroad: Immersion Xi'an, China

This course will bridge the content delivered in Chinese 198 and provide total immersion in Chinese language and culture. This specially designed course consists of two parts: a pre-and post-set of sessions in Chicago and two week immersion language program in Xi'an, China. The language program in China, to be delivered by Xi'an International Studies University, will consist of 6-hour daily sessions, Monday through Friday. Writing assignments as appropriate the discipline, are part of the course.

Prerequisite(s): Chinese 198 with a grade of C or better.

4 LECTURE HOURS. 4 CREDIT HOURS.



### **CLINICAL LABORATORY TECHNOLOGY**

### CLINICAL LABORATORY TECHNOLOGY 107 Immunohematology I

This course covers an introduction to the basic theory of Blood Banking, donor selection, the ABO and Rh systems and the procedures of ABO, Rh and DU typing tests. Writing assignments, as appropriate to the discipline, are part of the course. **1 LECTURE HOUR. 2 LAB HOURS. 2 CREDIT HOURS** 



### **COMMUNICATION MEDIA**

#### COMMUNICATION MEDIA 161 Beginning Photography

An introduction to black and white photography as an art medium, including the basics of camera and darkroom techniques and relevant aesthetic, historic, and critical issues. Writing assignments, as appropriate to the discipline, are part of the course.

6 LAB HOURS. 3 CREDIT HOURS.



### **COMMUNICATION MEDIA 162**

### **Photography of Persuasion**

Advanced photography darkroom skills; past and present use of photography in persuasion as in advertising and political campaigns; different approaches in magazine and newspaper advertising employing photographs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Communications Media 161 or Art 115. or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 

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#### **COMMUNICATION MEDIA 167 Digital Photography**

A course for photographers and photography students exploring applications of digital photography in the field of photography. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **COMPUTER INFORMATION SYSTEMS**

#### **COMPUTER INFORMATION SYSTEMS 101 Computer Science 101**

Theory and application of computers in information management; career opportunities, problem-solving techniques, input/output media, microcomputer applications, and Internet application. Writing assignments, as appropriate to the discipline, are part of the course. Laboratory hours to be arranged.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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### **COMPUTER INFORMATION SYSTEMS 102**

Introduction to Programming Logic

Techniques and problem-solving aids necessary for efficient solution of computer programming problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **COMPUTER INFORMATION SYSTEMS 103 Fundamentals of Programming**

How to use a language to program a computer for real world problem-solving in mathematics, science, business and other fields. The course will feature elements of program design, data types and expressions, procedures and modularity, conditions and loops, data and control structures, development of algorithms, and writing and debugging programs. Writing assignments, as appropriate to the discipline, are part of the course. Specific computer language to be selected by the instructor.

Prerequisite(s): Mathematics 118 or higher and English 101 eligibility, or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **COMPUTER INFORMATION SYSTEMS 111 Computer Operations**

Operation and routine maintenance of central processing unit; peripheral devices; initial program load; system utilities and system scheduling. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 101, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **COMPUTER INFORMATION SYSTEMS 112** Advanced Computer Operation

Operating system concepts; program resources, and their allocations, job scheduling, exception handling, set-up, relationship between operating system, hardware and user program, time sharing and teleprocessing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 111.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 116 Operating Systems I**

A theoretical and practical framework for the study of controlling software using current operating systems. Topics include interrupt handling, scheduling, query techniques, and access and storage methods. Students will be able to install, maintain and troubleshoot operating systems software. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** no more than three credit hours will count towards the CIS/IT requirements. Additional earned credit hours up to six will be counted towards elective and requires the Consent of Department Chairperson. ARC: 4 times.

Prerequisite(s): Grade of C or better in Computer Information Systems 101. or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 118** Information Technology Problem Solving

The course introduces students to a wide variety of problem-solving methodologies and Information Technology tools that build problem-solving skills needed to effectively meet the challenges of real world scenarios. They will use a variety of IT tools including programming, social media and networking among others. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **COMPUTER INFORMATION SYSTEMS 120** Introduction to Microcomputers

Fundamental concepts of computer information systems as applied to microcomputers in business and personal use; includes hands-on experience with a variety of microcomputer software. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than three credit hours will be counted towards the CIS/IT degree requirements. Additional earned credit hours up to six will be counted towards elective credit and requires the Consent of Departments Chairperson, ARC: 3 times.



### **COMPUTER INFORMATION SYSTEMS 123**

### **Microcomputer Spreadsheets**

Fundamental concepts of computer programs as exemplified in the electronic spreadsheet. Emphasis on business applications and personal financial management and tax preparation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Computer Information Systems 120 or consent of Department Chair.

1 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER INFORMATION SYSTEMS 122

Introduction to Word Processing on Microcomputers

Fundamental concepts of computer programs as exemplified in the electronic spreadsheet. Emphasis on business applications and personal financial management and tax preparation. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than three credit hours will be counted towards the CIS/IT degree requirements. Additional earned credit hours up to six will be counted towards elective credit and requires the Consent of Departments Chairperson. **ARC: 3 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



#### COMPUTER INFORMATION SYSTEMS 130 Introduction to Assembler Programming

Writing programs demonstrating use of assembler language. Writing assignments,

as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 103 and Computer Information Systems 135, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



### COMPUTER INFORMATION SYSTEMS 135

Introduction to COBOL Programming

Writing programs in COBOL for typical business problems. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **COMPUTER INFORMATION SYSTEMS 142**

### C-based Programming Language

Fundamentals of structured object-oriented programming through a study of program specification and design, algorithm development, flowcharts, problemsolving, programming concepts, classes and methods, control structures, arrays, strings, coding and testing using a modern software development environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Computer Information Systems 101 or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 144**

### Java-Based Programming Language

A block-structured high-level programming language commonly used in internet applications, including procedural and data abstraction programming styles; the concepts of design, testing, and documentation in programming, programming platforms, and software developments; selection, repetition, and sequence control structures; the basic programming elements of arrays, records, and files. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in CIS101 or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



IAI/MAJOR: DA KK OH TR HW WR

#### COMPUTER INFORMATION SYSTEMS 145 Database Management

In-depth concepts of database as they apply to micro computers in business and personal use to build information management systems. The network, hierarchical, and relational models are discussed. DBMS on microcomputers are used for lab assignments to implement the rational models. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Computer Information Systems 120 or consent of Department Chair.

2 LECTURE AND 1 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER INFORMATION SYSTEMS 158 Web Development I

Course emphasis will include the design and development of standards-based HTML, XHTML, and CSS documents with an introduction to JavaScript. Previous knowledge of file management, including downloading and uploading, is required.

Prerequisite(s): CS 101 or CS 120, or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



#### COMPUTER INFORMATION SYSTEMS 171 Computer Mathematics

Survey of numbers systems, conversion of one number system into another; fundamental operations of binary, octal and hexadecimal arithmetic. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 99 or 140.

3-4 LECTURE HOURS. 3-4 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 181**

### Web Development I/Basic Web Technologies

Emphasis on web site architecture, layout structure, template development, documentation and form development. This course will focus on the development of a basic template for a data driven web site. Style sheets will be used to organize and present page content. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Computer Information Systems 116, or 158, or 258 or consent of Department Chairperson.



### **COMPUTER INFORMATION SYSTEMS 182**

Web Development II/Client Side Scripting

Continuation of the Web Development series. This course integrates all of the skills learned in CIS-181 and focuses on client side scripting to verify data entry, manipulate and control web page elements, and store information on the client machines using cookies. Methods for initiating user authentication will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Web Development I Computer Information Systems 181 or consent of Department Chair.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 203**

### Advanced Basic Programming

Event-driven programming using the Visual Basic programming language. Includes algorithm development, structured design and file processing, and the use of various controls including control arrays, exception handling and the use multiple forms. Introduces database manipulation using Microsoft Access and database controls. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 103, or Grade of C or better in Computer Information Systems 142, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 235**

### Advanced COBOL Programming

Building on prior COBOL experience, structured programming design, implementation, testing, and documentation using COBOL, including arrays, records, string processing and files, and direct access file techniques, control beak logic, master file update, sorting, and searching techniques, and interactive programming. Program linkage and parametric processing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 135 and Computer Information Systems 142, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

### **COMPUTER INFORMATION SYSTEMS 242**

### Advanced C or C++ Language

Building on prior programming experience, design and implementation of largescale programs; abstract data types; and data structures: files, sets, pointers, lists, stacks, queues, trees, graphs. Program verification and complexity, recursions, and dynamic concepts: memory, scope, block structures. Text processing and introduction to searching and sorting algorithms. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 142, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: DA KK TR

### **COMPUTER INFORMATION SYSTEMS 244**

### Advanced Java Programming Language

Use of Internet programming language for design and implementation of largescale problems; management of abstract data types; data structures (files, sets, pointers, lists, stacks, queues, trees, graphs); program verification and complexity; recursion; dynamic concepts (memory scope, black structures); text processing; and an introduction to searching and sorting algorithms. The programming for computer graphics and animation and implemented for Internet usage. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 144 or consent of Department Chairperson

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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IAI/MAJOR: DA KK OH TR WR

#### COMPUTER INFORMATION SYSTEMS 250 Introduction to Systems

Analysis and design of information systems; includes analysis of organization and procedure, forms and work-flow, equipment selection, and implementation of systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 244 or consent of Department Chairperson

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### COMPUTER INFORMATION SYSTEMS 251

Introduction to Database Management Systems

Examination of data manipulation needs and comparison of traditional processes for meeting needs with data base approach; use of computer simulations to practice and apply database management system (DBMS) techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### COMPUTER INFORMATION SYSTEMS 255 Operating Systems/Client

General principles and specific applications of operating system on various computers. An overview. A theoretical and practical framework for the study of controlling software. The concepts of interrupt handling, multi-programming, multi-processing, scheduling and query techniques, and access and storage methods will be clarified through readings and discussions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER INFORMATION SYSTEMS 257

Introduction to Business Telecommunications

Study of the basic principles that apply to the general design of business telecommunication systems; covers appreciation for the scope of these systems and a logical approach to solving communications problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



### **COMPUTER INFORMATION SYSTEMS 258**

### Web Development II

This course extends the introductory concepts of CIS 158, using a variety of internet and general networking concepts, including interactive forms and CGI programming for the World Wide Web, multimedia development, intranets, server installation and management, database connectivity, and simple website administration. This will include multimedia additions, setting design styles, and installing on a web server.

Prerequisite(s): Computer Information Systems 158 or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



#### COMPUTER INFORMATION SYSTEMS 260 Computer Information Systems Field Project

Provides students with practical application of data processing skills by participation in a planned and coordinated field project. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

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### **COMPUTER INFORMATION SYSTEMS 265**

### **Computer Information Systems Internship**

Students gain data processing experience by working at an appropriate and supervised work-training station. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



### **COMPUTER INFORMATION SYSTEMS 280**

### **Computer Graphics**

Tips, techniques and advice for creating professional business presentations using text, bullets, tables, pie and bar charts, templates and clip art. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 120 and Visual Communications 122, or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER INFORMATION SYSTEMS 281 Web Development III/Server Side Programming

Continuation of the CIS 182. Part III presents dynamic web programming using server side programming techniques. Database integration into website is also introduced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Computer Information Systems 182 or NET 101 with a grade of C or better or consent of Department Chair.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.

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#### COMPUTER INFORMATION SYSTEMS 282 Web Development IV/Web Database Integration

Continuation of the CIS 281. Part IV covers advanced topics in web development, including but not limited to error handling, email, user profile, content management, basic online store and E-commerce fundamentals.

Prerequisite(s): Grade C or better in Computer Information Systems 281, or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER INFORMATION SYSTEMS 299

**Special Topic Computer Information Systems** 

Special topics in CIS will be discussed along with appropriate lab and/or field trip activities. New developments will be emphasized, especially materials useful in K-12 education and industry. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

1-4 LECTURE HOURS. 1-4 CREDIT HOURS.



### COMPUTER SECURITY AND FORENSIC INVESTIGATION

### COMPUTER SECURITY AND FORENSIC INVESTIGATION 101 General Technology Essentials

This course is a basic requirement for the Computer Security and Forensic Investigation certificate Program/Plan 297. Explores the basic areas of knowledge necessary to understand information security architecture and lay a firm foundation for further study and coursework. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### COMPUTER SECURITY AND FORENSIC INVESTIGATION 102 Information Security Essentials

This course covers essential terminology, concepts, principles, and practices in Information Security and Assurance. The course balances a mix of technical and non-technical components for building, managing, and maintaining secure systems. The course introduces students to risk management, security policies, laws and ethics as they relate to Information Security, and prevailing controls and countermeasures used to minimize the risk of security breaches and intrusions. The course also provides an overview of the current trends in Information Security and the challenges faced when attempting to build secure systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade C or better in Computer Information Systems 101 or Computer Information Systems 116, or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER SECURITY AND FORENSIC INVESTIGATION 202 Introduction to Cybercrime

This course is one of the requirements for the Computer and Forensic Investigation certificate Program/Plan 297. This course is designed to introduce various types and levels of cybercrime, the far-reaching consequences of such crime, and some recovery measures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 101. 3 LECTURE HOURS, 3 CREDIT HOURS,



### COMPUTER SECURITY AND FORENSIC INVESTIGATION 203 Financial Cybercrime

This course is one of the requirements for Computer Security and Forensic Investigation certificate Program/Plan 297. Explores the various types of economic cybercrime, the far-reaching consequences of such crime, and some recovery and countermeasures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in COMPSFI 102 and COMPSFI 202. 3 LECTURE HOURS. 3 CREDIT HOURS.

WR

### COMPUTER SECURITY AND FORENSIC INVESTIGATION 204 Introduction to Computer Forensics and Law

This course is one of the requirements for Computer Security and Forensic Investigation certificate Program/Plan 297. Designed to provide an introduction to the world of computer forensics and the attendant legal issues concerning privacy and electronic evidence. Explores computer forensics as the science of collecting, preserving and analyzing data from computers so they can be admissible at a company discipline hearing or in a court of law. Surveys problems of maintaining a secure technological environment, protecting the identity of individuals, as well as protecting confidential information. In addition, it will introduce techniques used in the collection and analysis of evidence. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in COMPSFI 102 and COMPSFI 202.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### COMPUTER SECURITY AND FORENSIC INVESTIGATION 205 Computer Forensics Technology

This course is one of the requirements for the Computer Security and Forensic certificate Investigation Program/Plan 297. A continuation of COMPSFI 204. An in-depth, hands-on analysis and practice of computer forensics investigation techniques, technology, and procedures in a setting that simulates a real network environment. Demonstrates how to manage investigations from start to finish, how to use computer forensic technology to conduct such investigations, and how to present collected information to investigations, and how to present collected information to attorneys and courts. Follows six areas in computer forensic investigation: strategy, documentation techniques, use of technology, industry procedures, courtroom techniques, and enforcement developments and trends. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in COMPSFI 203 and COMPSFI 204.

6 LAB HOURS. 3 CREDIT HOURS.



### **COMPUTER SECURITY AND FORENSIC INVESTIGATION 206** Internet Vulnerabilities, Criminal Activities and Investigative Procedures

This course is one of the requirements of the Computer Security and Forensic Investigation Program/Plan 297. An overview of appropriate, lawful investigative procedures for the collection, documentation, preparation and presentation of evidence from internet cybercrime investigations. The lab course focuses on the areas of search and seizure, the use of some evidence analysis and presentation software and other appropriate software tools. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 158, or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



### COMPUTER SECURITY AND FORENSIC INVESTIGATION 213 Information Security Technology

Provides a hands-on review and analysis in a laboratory environment of the following six major areas of information security technology: firewalls, intrusion detection, virus detection, encryption, authentication/authorization, and trending/tracking/ logging/analysis. Provides an understanding of each technology on a conceptual level as well as an understanding of specific technology brands. Demonstrates how to build and manage a complete information security architecture within a corporate computing environment. Writing assignments, as appropriate the discipline, are part of the course.

Prerequisite(s): Grade of C or better in COMPSFI 102 and COMPSFI 202.

6 LAB HOURS. 3 CREDIT HOURS.



### COMPUTER SECURITY AND FORENSIC INVESTIGATION 214 Information Security Systems Analysis

This course is one of the requirements for Computer Security and Forensic Investigation certificate Program/Plan. Continuation of COMPSFI 103. Identification of classes of security systems and monitoring procedures. Introduces security and monitoring procedures and critical elements of effective security systems. Provides an overview of the challenges faced when attempting to build a secure security systems, and explores possible counter-measures to intrusions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100 and Grade of C or better in Computer Information Systems 120, or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

WR

### COMPUTER SECURITY AND FORENSIC INVESTIGATION 215 Information Security Domain

An overview of the critical information security domains. The Common Body of Knowledge (CBK) in information security is extensive and requires a thorough understanding of the security discipline or domains. This course will cover what each domain is, what area it encompasses, and how it is integral to the information security process. Provide an excellent preparation for those who wish to pursue certification as an information security professional. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in COMPSFI 213.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### COMPUTER SECURITY AND FORENSIC INVESTIGATION 216 Information Security Program Management

This capstone course is one of the requirements for the Computer Security and Forensic Investigation certificate Program/Plan 297. Explores the critical areas of security policies and procedures that govern how an institution views the importance, often underestimated, of securing the network environment and the relationship between those policies and procedures and the network security layers that need to be protected. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): COMPSFI 102 and COMPSFI 214.

3 LECTURE HOURS. 3 CREDIT HOURS.



### COMPUTER SECURITY AND FORENSIC INVESTIGATION 231 Internetworking Security

The course provides a detailed understanding of prevailing network security principles and practices. It covers strategies, tools and configurations used to secure network devices and network infrastructures. Students develop the skills necessary to secure routers and switches, and learn how to apply security controls and countermeasures to minimize security risks that modern network infrastructures face. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade C or better in Networking Technologies 122, or consent of the Department Chairperson.



### **CONSTRUCTION MANAGEMENT**

### **CONSTRUCTION MANAGEMENT 601**

### Introduction to Construction

The course is designed to give students a foundation in the basic concepts of construction. The course focuses on the fundamental skills needed in the industry for the core construction class; industry related terminology, construction processes and procedures, scale reading, applying construction calculation, measuring, tools and usage, and industry job descriptions. Writing assignments, as appropriate to the discipline, are part of the course.

#### 2 LECTURE HOURS. 2 CREDIT HOURS.



#### CONSTRUCTION MANAGEMENT 602 Methods of Building Construction

The course is designed to develop an understanding of the methods of construction of residential and commercial type building and includes a survey of different types of construction and their advantages and limitations. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## CONSTRUCTION MANAGEMENT 603

### **Building Materials and Testing**

Examination of the characteristics of materials such as wood, masonry, concrete, iron, and steel relative to their basic use in the construction industry. The physical properties of each will be studied relative to actual in-service behavior. This course is an introduction to the field and laboratory methods of testing soils, concrete, and steel. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **CONSTRUCTION MANAGEMENT 604**

### **Blueprint and Specifications**

Designed to provide proper knowledge of blueprints reading as it relates the architectural or building construction industry. The course covers the theory of orthographic projections, reading floor plans and elevations drawings, symbols and notations, scaling and dimensioning practices, reading blueprints of structural information, electrical and mechanical trade drawings. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **CONSTRUCTION MANAGEMENT 605**

### **Construction Cost Estimating**

This course is designed to provide students with a basic introduction to the methods of construction, estimating and developing the associated costs. Students will gain a working knowledge of materials takeoffs, the estimating process, building and estimating spreadsheets, unit cost, assembles for different trades, overhead and profit. Manual and computer approaches to solving estimating problems will be used. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Construction Management 604 and Computer Information Systems 120.* 

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### CONSTRUCTION MANAGEMENT 606 Construction Contracting Specs

Introduction the functions and operations of a construction office, including bidding, construction contracts and specifications, bonds and insurance, labor law and labor relations. Legal aspects and interpretation of contracts and specifications. This course is designed to give students a general working knowledge of the various types of contracts, specification, and delivery methods. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Construction Management 604.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### CONSTRUCTION MANAGEMENT 607 Construction Scheduling/Management

An introduction to the methods of construction scheduling and project management. Students will become familiarized with using different scheduling approaches, how to handle worksite paperwork, and to plan the need for manpower, materials, and equipment coordination with the project budget. The course will use manual and computer approaches to solving scheduling programs. Discussion and critical path methods (CPM) and analysis are included in the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Construction Management 604 and Computer Information Systems 120.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### CONSTRUCTION MANAGEMENT 608 Project Management

This course is designed to provide students with a basic understanding of the process of a construction project and provide the tools that are necessary to estimate or manage a construction project. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Construction Management 604, 607, and Computer Information Systems 120.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### CONSTRUCTION MANAGEMENT 609 Construction Safety II

This course covers thirty (30) hours of training, required by the Occupational Health and Safety Act (OSHA) that apply toward the 30-hour Construction Industry course completion card. The course covers topics pertaining to regulations covered by Standard 28 CFR 1926. Upon successful completion of the course, participants will receive an OSHA construction safety and health 30-hour course completion card from the Department of Labor. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### CONSTRUCTION MANAGEMENT 610 Construction Internship

This course is designed to give students the practical application of current construction methods. There will be a variety of projects from the residential and commercial sectors. The sites selected will vary due to availability and weather. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson.

3 LAB HOURS. 3 CREDIT HOURS.



### **CONSTRUCTION MATERIALS TECHNICIAN 611**

Hot Mix Asphalt Level I

This course will include an introduction to laboratory and field equipment including proper utilization and calibration. Testing and general information on asphalt and the IDOT QC/QA will be presented. Student will be prepared to sit for the IDOT Level I certification in performing Hot Mix Asphalt (HMA) testing in the laboratory and field. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### CONSTRUCTION MATERIALS TECHNICIAN 612 Portland Cement Concrete Level I

The course is designed to prepare students for level ACI/IDOT certification in performing Portland Cement Concrete (PCC) activities in the laboratory test. Testing and general information on the PCC and the eIDOT QC/QA will be covered. Persons completing this course will be able to do the field testing for PCC and QC/ QA projects. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



### CONSTRUCTION MATERIALS TECHNICIAN 613 Aggregates and Soils Level I

This course is designed to prepare students for IDOT 3 day Aggregates and Soils certification in performing aggregates and soil material testing in the laboratory, including typical laboratory test methods and in the field. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



### CE

### CE 13 337

### **Commercial Driver Training Theory**

This course is designed for individuals with little or no commercial driving experience. This course provides the theoretical foundation to become a commercial driver. Through this course, students will obtain their commercial driver's license learner's permit. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Prospective students must be 21 years of age or older, possess a valid driver's license, a good driving record (demonstrated through a court ordered motor vehicle report) and pass a physical examination.

**6 LECTURE HOURS. 6 CREDIT HOURS.** 



### CE 13 338

### **Passenger Driver Theory**

This course is designed for individuals with little or no commercial driving experience. This course provides the theoretical foundation to become a commercial driver. Through this course, students will obtain their commercial driver's license learner's permit. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Prospective students must be 21 years of age or older, posses a valid driver's license, a good driving record (demonstrated through a court ordered motor vehicle report) and pass a Department of Transportation (DOT) physical examination.

5 LECTURE HOURS. 5 CREDIT HOURS.



CE 14 116 Improving Your English 1 LECTURE HOUR. 1 CREDIT HOUR.

# KK OH

CE 14 117 Improving Your English II 1 LECTURE HOUR. 1 CREDIT HOUR.



### CE 14 118

Improving Study Habits and Techniques 1 LECTURE HOUR, 1 CREDIT HOUR.

КК

CE 14 119 Improving Your English III 1 LECTURE HOUR, 1 CREDIT HOUR.



### CE 14 174 Improving Study Habits and Techniques II <u>ARC: 2 times</u>

1 LECTURE HOUR. 1 CREDIT HOUR.

КК

CE 14 305 Functional Skills: Reading I <u>ARC: 2 times</u> 1 LECTURE HOUR. 1 CREDIT HOUR.

КК

CE 14 306 Functional Skills: Reading II 1 LECTURE HOUR. 1 CREDIT HOUR.

КК

CE 14 307 Functional Skills: Reading III 1 LECTURE HOUR. 1 CREDIT HOUR.

CE 14 308 Functional Skills: Mathematics I <u>ARC: 2 times</u> 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 309 Functional Skills: Mathematics II ARC: 2 times 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 310 Functional Skills: Mathematics III 1 LECTURE HOUR. 1 CREDIT HOUR.

# **COURSE DESCRIPTIONS**

# Credit Courses (A-Z)

### CE 14 313

Basic Writing Skills I 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 802 College Preparatory 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 807 Basic Reading 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 810 Improving Your Spelling 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 811 Improving Your Spelling II 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 815 Structured Tasks for Adult Readers I 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 816 Structured Tasks for Adult Readers II 1 LECTURE HOUR. 1 CREDIT HOUR.

КК

CE 14 817 Structured Tasks for Adult Reader III 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 818 Structured Tasks for Adult Readers IV 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 821 Vocabulary Development 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 14 823 Vocabulary Development III 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 15 302 Improving Your Mathematics I 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 15 303 Improving Your Mathematics II 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 15 311 Improving Your Mathematics III 1 LECTURE HOUR. 1 CREDIT HOUR.



CE 15 920 Grammar and Letter Form 1 LECTURE HOUR. 1 CREDIT HOUR.



### **COOPERATIVE WORK EXPERIENCE**

### **COOPERATIVE WORK EXPERIENCE 101** Cooperative Education Exploration

Career planning, job entry skills, guidance to assist students in exploring and assessing their interests, aptitudes and abilities for consideration of career goals; development of skills necessary for job search success and job entry preparation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 100 or Grade of C or better in English 127 and Grade of C or better in Reading 125, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 105 Business Technologies CWE

The Cooperative Education course is designed to provide employment skills as a concurrent and integral part of a student's educational program in a number of career areas. Students are placed in an approved employment situation mutually agreed upon by students, college staff, and employer, with the opportunity to apply knowledge and gain exposure to work methods unavailable in the classroom. College staff members develop with each student a written educational plan, including performance-based measurable objectives. Guidance and supervision are regularly provided by college staff members who visit students at work, confer with the employer, measure progress, and work out any concerns. Follow-up seminars with the staff may be scheduled for up to two hours per week.

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS, 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 106 Commercial-Data Processing CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 107 Health CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 108 Engineering and Industrial Technologies CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 109 Natural Science Technologies CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 110 Public and Human Services CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



#### COOPERATIVE WORK EXPERIENCE 205 Business Technologies CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 206 Commercial-Data Processing CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator.



### COOPERATIVE WORK EXPERIENCE 207 Health CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 208 Engineering and Industrial Technologies CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 209 Natural Science Technologies CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COOPERATIVE WORK EXPERIENCE 210 Public and Human Services CWE

Prerequisite(s): Consent of Department Chairperson/Coordinator. 2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### COSMETOLOGY

### COSMETOLOGY 101

### Introduction to Cosmetology/Cosmetic Art

Topics covered in this course include orientation to the cosmetology field, its history, and the current state of the profession. This course also provides a foundation for understanding the histology of hair, principles of personal hygiene, requirements and procedures for sterilization and sanitation, shampoo and scalp treatment, roller control, manicures and pedicures. Additionally, students will gain specific knowledge of the techniques, principles, purposes, benefits and the contra-indications of applying hand, neck, and facial massage. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 98/Reading 99, or ESL 99, and Mathematics 3001.

1 LECTURE HOUR AND 12 LAB HOURS. 5 CREDIT HOURS.



#### COSMETOLOGY 102 Hair Shaping Technology

Students learn to identify, safely use and properly care for the various types of tools used for cutting and shaping hair. Students develop skill and proficiency in shaping hair with scissors and razors, as well as in various methods of cutting hair as required by specific hair styling and permanent waving. Considerable emphasis is placed on efficiency and quality. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101 or concurrent with 101 and 102.

15 LAB HOURS. 5 CREDIT HOURS.

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### COSMETOLOGY 103 Basic Styling Technology

Through this course, students receive comprehensive instruction regarding the tools, materials, equipment and methods of basic waving and styling. Skills are developed in the proper application of sculpture curls, roller direction, comb-out techniques, and basic styling. Emphasis is placed on adapting hairstyles to suit the individual and recognizing the texture, elasticity and porosity of various types of hair. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101 and 102, or concurrent with 102.

15 LAB HOURS. 5 CREDIT HOURS.



#### COSMETOLOGY 104 Hair Tinting Technology

Studying the principles and techniques of applying hair tints and bleaches, students learn color-blending methods and they gain knowledge about the composition, merits and limitations of chemicals used in the cosmetology field. Students also learn about potential reactions of various hair and scalp textures to specific chemicals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101, 102, and 103 or concurrent with 102 and 103. 9 LAB HOURS. 3 CREDIT HOURS.



**COSMETOLOGY 105** 

### Salon Technology I

This course provides opportunities for the practical application of specific customer services for which students has received previous training. Work is performed under the direct supervision of a licensed and experienced instructor. Emphasis is placed on the development of proficiency. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101, 102, 103 and 104, or concurrent with 103 and 104. 15 LAB HOURS. 5 CREDIT HOURS.



### COSMETOLOGY 106

### Salon Technology II

This course provides continued opportunities for the practical application of specific customer services for which students has received previous training. Work is performed under the direct supervision of a licensed and experienced instructor. Emphasis is placed on the development of proficiency. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101, 102, 103 and 104, and 105, or concurrent with 104 and 105.

15 LAB HOURS. 5 CREDIT HOURS.



### **COSMETOLOGY 201**

### **Advanced Styling Technology**

Students receive advance training to increase proficiency in all areas of customer servicing as it relates to cosmetology. Students will refine and further develop specific skills and technique previously learned to enhance hair shaping, coloring, tinting, waving and creative styling. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101, 102, 103, 104, 105 and 106, or concurrent with 106. 12 LAB HOURS. 4 CREDIT HOURS.



#### COSMETOLOGY 202 Summative Seminar

This course provides the opportunity for practical application of all previously acquired cosmetology knowledge and skills. Although trainees perform all work under direct supervision of a licensed and experienced cosmetology instructor, they are much less dependent upon instructors in carrying out assignments. Considerable emphasis is placed on efficiency and quality of work performed while servicing clients. Finalizing of the portfolio and salon floor plan is required for this course. Preparation and review for the Illinois State exam will be provided. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Cosmetology 101, 102, 103, 104, 105, 106 and 201, or concurrent with 106, 201.

12 LAB HOURS. 4 CREDIT HOURS.



### **CRIMINAL JUSTICE**

### CRIMINAL JUSTICE 102

#### Administration of Criminal Justice Operation of the agencies of criminal justice: police, prosecution, courts, correctional institutions, probation and parole. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: DA KK MX OH TR HW WR

#### CRIMINAL JUSTICE 104 Street Law

The course contains information and activities designed to provide students with the ability to analyze, evaluate and understand legal issues related to business transactions, landlord and tenant relations, marriage and divorce, and constitutional issues like procedural and substantive due process. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **CRIMINAL JUSTICE 114** Administration of Juvenile Justice

Studies in the etiology of juvenile delinquency, analysis of the agencies of control of juvenile behavior, and the roles of courts and correctional institutions in the administration of juvenile justice. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: DA KK MX OH TR HW WR

### **CRIMINAL JUSTICE 151**

### **Practice of Probation and Parole**

Development, philosophy, organization and administration of probation and parole; survey of principles, investigation, supervision, treatment and utilization of community resources to rehabilitate and reintegrate the offender into society. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### CRIMINAL JUSTICE 155 Introduction to Corrections

This course covers the history and development of corrections at the local, state and federal levels with emphasis on the goals, structure, and operations of correctional institutions. Included are alternatives to incarceration and the future of corrections within the American criminal justice system. This course is equivalent to the Illinois Articulation Initiatives Criminal Justice course numbered CRJ-911. Written assignments, as appropriate to the discipline, the course.

Prerequisite(s): Grade of C or better in Criminal Justice 102, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: DA TR HW WR

### **CRIMINAL JUSTICE 170**

### Scope and Purpose of Private Policing

Study of private policing as an extension of law enforcement in business, industry or mercantile establishments; applications within civil law enforcement; role of the security officer; analysis and development of US public and private policing. Writing assignments, as appropriate to the discipline, are part of the course.



### **CRIMINAL JUSTICE 172**

#### Management and Supervision for Private Policing

Study of police supervisory and management principles; concepts of organization, communication, planning and human relationships. Analysis of problems and responsibilities in private security at middle-management; role of security director from behavioral standpoint. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **CRIMINAL JUSTICE 173**

### **Issues and Problems of Private Policing**

Analysis of current issues and occupational aspects of private policing; implementation of federal, state and local government recommendations applied to private policing. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **CRIMINAL JUSTICE 174**

Law for Private Police Survey of criminal law and applications for the private police industry; substantial

criminal law, rules of evidence, criminal court procedures, court presentation; analysis of current civil court actions relating to private security. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



### **CRIMINAL JUSTICE 202**

**Issues in Criminal Justice** 

Critical issues related to crime and urban society; analysis and evaluation of documents in the field of Criminal Justice. Consideration of newly proposed reforms and the method of implementing these reforms. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



#### **CRIMINAL JUSTICE 210**

#### **Industrial Security for Private Policing**

Industrial security related to operation of private industrial security force; functions of industrial security; corporate objectives of protection plans and key components of industrial security analyzed as they relate to employee control, industrial espionage, fire prevention and bomb incident management. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### CRIMINAL JUSTICE 211

Introduction to Investigation

Intensive study and analysis in investigative procedures; strategy and tactics of obtaining and analyzing evidence through testimonial evidence, physical evidence and records; reconstructing the crime; preservation of evidence and case preparation. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### CRIMINAL JUSTICE 215

### Terrorism

Detailed study of terrorism, counter terrorism, terrorist personalities, and terrorist groups, including types, tactics, and trends on a worldwide scale as well as domestically. This course also examines the issues of prevention, civil liberties, nation building, and homeland security. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### CRIMINAL JUSTICE 221 Police Organization and Management

Police organization as a means by which police goals are achieved. Variations in organizational patterns resulting from differing and changing objectives of police service. Analysis and evaluation of urban law enforcement problems and procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **CRIMINAL JUSTICE 222**

### **Professional Responsibility**

Examination of professional ethics and legal responsibilities of the criminal justice practitioner. Legal accountability of criminal justice practitioners; principles and techniques of stress management for maintenance of performance and health. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator

3 LECTURE HOURS. 3 CREDIT HOURS.



#### CRIMINAL JUSTICE 234

### **Criminal Law and Procedure**

Analysis of the nature of substantive criminal law, with emphasis on its historical and philosophical development in the United States. Examination of constitutional rights of the defendant, as these relate to arrest, rules of evidence, and courtroom procedure at pre-trial and trial level. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **CRIMINAL JUSTICE 250**

### Introduction to Criminology

This course covers the basics of criminology, criminological theories, principles and concepts, and the history and development of criminology. Included is the study of society's reaction to crime and criminals as well as those organizations and agencies designed to combat crime. This course is equivalent to the Illinois Articulation Initiatives Criminal Justice course numbered CRJ-912. Written assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Criminal Justice 102, or consent of Department Chairperson.



### **CRIMINAL JUSTICE 256**

### **Constitutional Law**

Study of the Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments to the United States Constitution, as these govern police and court procedures and the rights of citizens. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **CULINARY**

### **CULINARY 700**

### **College Success with Hospitality Perspective**

This course introduces students to the expectations of the college community and to the academic skills that promote success during their college career. Through coursework, students will develop strategies to improve their academic and professional skills. Topics will include: note-taking methods, test-taking strategies, computer literacy, time management, stress management, problem-solving and critical thinking, career exploration and presentation skills. Students will also learn the importance of taking personal responsibility for their academic and career choices. Topics will be approached from a variety of interdisciplinary perspectives that focus on connecting individuals to their local and global communities in the culinary and hospitality industries. Through assignments that integrate community engagement, service learning, and hospitality and/or on-campus service projects, students will make connections between their coursework and their lives. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98.

**3 LECTURE HOURS 3 CREDIT HOURS.** 



### **CULINARY 701**

### Introduction to Food Service I

Introduction to the food service industry (history, organization and future challenges); career opportunities; standards of professionalism; instruction in principles and procedures of basic equipment and its use; basic food and kitchen safety; beginning fundamentals of cooking. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98; Concurrent enrollment in Culinary 703, 705, and 708.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **CULINARY 703**

#### Food Sanitation and Safety I

Topics will include prevention of food-borne illness, HACCP procedures, facility sanitation, legal guidelines, kitchen safety, and safe food preparation, storing, and reheating guidelines. The National Restaurant Association ServSafe examination will be a part of this course. Students who pass the exam will receive the ServSafe certification. Writing assignments, as appropriate to the disciplines, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98; Concurrent enrollment in Culinary 701, 705, and 708.

1-2 LECTURE HOURS. 1-2 CREDIT HOURS.



### **CULINARY 705**

### **Chef's Training I: Section A**

Designed to give students the opportunity to investigate and assess culinary arts as a possible career goal. It covers basic *mise en place* including knife skills, proper station set-up, classical cooking terminology, standard cooking methods, stock preparation, sauce preparation and heat transfer methods. Develops the basic skills necessary for employment as food service professionals, emphasizing professionalism and team work as a basic element for success. Writing assignments. as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125 and Mathematics 98, Concurrent enrollment in Culinary 701,703 and 708.

1 LECTURE HOUR AND 9 LAB HOURS, 4 CREDIT HOURS,



### **CULINARY 706**

#### **Chef's Training II: Section A**

Introduces students to Garde Manager-cold kitchen techniques including production of soups, salads, sandwiches, sausages, terrines, pates, galantines, cheese, hors d'oeuvres, canapes, appetizers, condiments, pickles and breakfast items. Includes sanitation as it applied to cold food preparation, the equipment in the Garde Manager kitchen and garnishes, both individual plate presentation and buffet presentation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Culinary 701, 703, 705, and 708 and concurrent enrollment in Culinary 714 and Culinary 709, or consent of Department Chairperson.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



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### **CULINARY 707**

Food Service Technology

Introduces kitchen calculations, including costing and conversion, determining revenue and food cost, menu planning and pricing, cost control in a foodservice environment, and an overview of the use of computers in a professional kitchen. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Culinary 721 and Culinary 723, or consent of Department Chairperson.

**4 LECTURE HOURS. 4 CREDIT HOURS.** 

# **CULINARY 708**

**Chef's Training I: Section B** 

Covers basic mise en place including knife skills, proper station set-up, classical cooking terminology, standard cooking methods, stock preparation, sauce preparation and heat transfer methods. Develops the basic skills necessary for employment as a food service professionals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125 and Mathematics 98; concurrent enrollment in Culinary 701, 703, and 705.



### **CULINARY 709**

### **Chef's Training II: Section B**

This course is designed to introduce students to Garde Manager-cold kitchen techniques including production of soups, salads, sandwiches, sausages, terrines, pates, galantines, cheese, hors d'oeuvres, canapes, appetizers, condiments, pickles and breakfast items. The student will not only be introduced to the production of these items but will also become familiar with sanitation as it applies to cold food preparation, the equipment in the Garde Manager kitchen and garnishes, both individual plate presentation and buffet presentations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Culinary 701, 703, 705, and 708 or consent of Department Chairperson; concurrent enrollment in Culinary 714 and 706.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



### CULINARY 714

Nutrition for Chefs This course provides the basic

This course provides the basic principles of nutrition and their relation to food preparation. Nutrition's role in culinary techniques, ingredient selection, flavor development and creation of healthful menu options will be applied in lecture and experiential learning. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Culinary 701,703,705 and 708 or consent of Department Chairperson.

**4 LECTURE HOURS. 4 CREDIT HOURS.** 



#### CULINARY 721 Entrée Preparation

Study of principles, methods and techniques involved in the preparation of international cuisines with an emphasis on specialized cooking methods and flavor profiles; practical experience in banquet and buffet production with an emphasis on presentation techniques and design; proper and safe use of tools, materials and quantity foodservice equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Culinary 701,703,705, and 708 or consent of Department Chairperson. Concurrent enrollment in Culinary 707 and 723.

2 LECTURE HOURS AND 15 LAB HOURS. 7 CREDIT HOURS.



### CULINARY 722

### **Entrée Sanitation and Safety**

Upon completion, students will be able to perform advanced techniques of safety and sanitation as they relate to the main menu items. Writing assignments, as appropriate to the discipline, are part of the course.

3 LAB HOURS. 1 CREDIT HOUR.



### CULINARY 723

### **Food Service Management**

Instruction in food service management and executive responsibility in all facets of the food service industry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98 or consent of Department Chairperson. Concurrent enrollment in Culinary 707 and 721.

4 LECTURE HOURS AND 3 LAB HOURS. 5 CREDIT HOURS.



### CULINARY 728

### Advanced Cooking

Study of principles, methods and techniques involved in quantity preparation of appetizers, sandwiches, salads, soups, stocks, sauces, meats, seafood, poultry, eggs, milk, cheese, bakery products, desserts and beverages; practical experience in proper and safe use of tools, materials and quantity foodservice equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Culinary 701, 703, 705, and 708, or consent of Department Chairperson.

1 LECTURE HOUR AND 18 LAB HOURS. 7 CREDIT HOURS.



### **DENTAL ASSISTING**

#### **DENTAL ASSISTING 100** Oral and Dental Anatomy

This course is designed to give students a basic understanding of crown and root development, morphology, and function and positional relationships of the teeth within the dentition. This course includes introduction to the embryological development and microscopic examination of orofacial organs and structures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Current and valid CPR certification, up-to-date vaccination history and/or provider documentation of exception and admission into the Dental Assisting Program Plan 399.

2 LECTURE HOURS. 2 CREDIT HOURS.



### DENTAL ASSISTING 101

**Dental Medical Emergencies** 

This course is designed to introduce students to the signs, symptoms, and treatment of medical emergencies in the dental office. This course introduces students to the medical history and patient assessment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Current and valid CPR certification, up-to-date vaccination history and/or provider documentation of exception and admission into the Dental Assisting Program Plan 399.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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### DENTAL ASSISTING 102

**Dental Assisting Procedures I** 

This course is designed to provide students with the basic concepts, procedures, and current regulatory mandates related to infection control and the management of hazardous material for the dental team. This course also introduces study of dental materials dealing with the science of development, properties, manipulation, care, evolution and evaluation of materials. It introduces students to basic equipment, instruments, and procedures associated with the dental office, with emphasis placed on four-handed dentistry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Current and valid CPR certification, up-to-date vaccination history and/or provider documentation of exception and admission into the Dental Assisting Program Plan 399.

### **DENTAL ASSISTING 103**

### **Dental Assisting Procedures II**

This course is designed to increase skill competency taught in DENTAL 102 relating to operative and surgical dentistry. Patient care, management, and diagnosis and treatment planning will be presented. This course also incorporates more advanced study of dental materials dealing with the science of development, properties, manipulation care, evolution and evaluation of materials. It introduces students to more dental specialties and increase chair-side competency.

Prerequisite(s): Grade of C or better in DENTAL 102 and Consent of Department Chairperson. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



### **DENTAL ASSISTING 104**

### **Dental Radiography I**

This course provides an introduction to dental radiography. The material covered includes basic theory regarding radiography, its equipment and equipment usage, the effects and hazards of radiation, and operator/patient protection. The types of exposures included in this course include bitewings and periapicals. This course provides students with the technical knowledge needed for positioning, exposing, processing, mounting and evaluating dental radiographs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Current and valid CPR certification, Up-to-date vaccination history and/or provider documentation of exception and admission into the Dental Assisting Program Plan 399.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **DENTAL ASSISTING 105**

**Dental Radiography II** 

Utilizing the basic knowledge and skills emphasized in DENTAL 104, this course increases the skill competency levels to prepare diagnostically acceptable intraoral radiographs using different techniques. In addition, this course will encompass the techniques for exposing radiographs on children, edentulous patients, and other special populations. The students will receive practical experience exposing radiographs on mannequins and patients. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in DENTAL 104 and Consent of Department Chairperson. **1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.** 



#### **DENTAL ASSISTING 106**

#### Head and Neck Anatomy for Dental Assistant

Head and neck anatomy is designed to increase students understanding of the major anatomical landmarks of the body, head and neck. Covered topics include: nervation, musculature skeleton, and blood supply and function. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Current and valid CPR certification, up-to-date vaccination history and/or provider documentation of exception and admission into the Dental Assisting Program Plan 399.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### DENTAL ASSISTING 107 Prevention

A review of the etiology of dental care, and a study of dental plaques and periodontal disease with emphasis on prevention and control. The role of the dental assistant in regards to oral health education will be the primary focus. The basic content, including proper nutrition, and oral hygiene, directs students toward the ability to practice their communication skills and nutritional counseling skills as they relate to the preventive dental health education. The student will receive practical experience for the delivery of dental health education. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better of DENTAL 104 and Consent of Department Chairperson. 2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.

MX

### **DENTAL ASSISTING 109**

### **Dental Office Procedures**

This course introduces students to the business skills needed to function successfully as a dental secretary/office manager will be explored. Written skills will be stressed and practiced, and proper bookkeeping will be explained and practiced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better of DENTAL 104 and Consent of Department Chairperson. 1 LECTURE HOUR. 1 CREDIT HOUR.

#### DENTAL ASSISTING 112 Dental Assisting Externship

A clinical practice learning experience to increase dental assisting skill to jobentry level competency. Clinical assignments in various dental specialty practices, as well as general dentistry practices will provide opportunities for advance skill development in chair side assisting techniques, clinical support, and business office procedures. Students will demonstrate effective communications skills. Ethical, legal, and personal responsibilities, testing and certification requirements, employer-employee relationships, job opportunities, professional development and continuing education and current techniques/equipment will be discussed in group settings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better of DENTAL 104 and Consent of Department Chairperson. **1 LECTURE HOUR AND 15 LAB HOURS. 5 CREDIT HOURS.** 



### DENTAL HYGIENE

### DENTAL HYGIENE 110

### Oral Microbiology and Immunology

Introduction to the general principles of microbiology, including the morphology, physiology, and classification of bacteria and related organisms. Basic concepts of immunology, especially in relationship to oral diseases are covered. Specific attention is given to oral microbial infections. Emphasizes concepts of applied microbiology as it pertains to dental hygiene practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222, and a grade of C or better in Biology 226, and Biology 227, and Chemistry 121.



### **DENTAL HYGIENE 112**

### **Concepts of Preventive Therapy I**

Orientation to the profession of dental hygiene and the role of the dental hygienist in the educational and therapeutic oral health services provided in the development of an individualized plaque control program. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 121**

### **Principles of Dental Hygiene I Lecture**

Fundamental theories and skills necessary to perform oral prophylaxis treatment. Principles of disease transmission, infection control, instrumentation, and the examining and charting of oral conditions will be presented. Concepts and procedures will be systematically presented through the lecture component and applied in the clinical laboratory sessions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 110 and 112 and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 122**

### **Principles of Dental Hygiene II Lecture**

Systematic presentation of additional theories and skills necessary to perform an oral prophylaxes and supplementary techniques. Emphasis will be placed on additional principles of instrumentation, instrument sharpening techniques, polishing technique, use of fluorides, taking alginate impressions, comprehensive periodontal evaluation, dental and periodontal charting, blood pressure measurement, medical emergencies in the dental office, classification of dental caries, use of phase microscope, and dental hygiene planning. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 121 and 123.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 123**

### **Principles of Dental Hygiene I Lab**

Companion course designed for the application of concepts presented in Dental Hygiene 121. Practice provided in the pre-clinical laboratory setting. Instrumentation skills are performed on typodonts and on student partners to a specified standard of competency. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 112.

6 LAB HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 124**

### Principles of Dental Hygiene II Lab

Companion course designed for the application of concepts presented in Dental Hygiene 122 within the laboratory/clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 121, 122 and 123.

9 LAB HOURS. 3 CREDIT HOURS.



### **DENTAL HYGIENE 125**

### **Nutrition and Biochemistry**

An introductory study to provide an integrated background of the fundamental principles of general biochemistry, metabolism, oral biochemistry and nutrition. Particular reference is made to the molecular components of cells, their chemical processes, the biological basis of dental disease, and the clinical application of nutritional theory on the counseling of dental patients. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Chemistry 121 and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### DENTAL HYGIENE 126 Dental Radiology

The application of the fundamental principles of radiology in the study of teeth and surrounding structures. Provides pre-clinical laboratory and beginning clinical experience in exposing, processing, mounting, and basic interpretation of dental radiographs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Dental Hygiene 131, 133, and Admission into Program or consent of Department Chairperson.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### DENTAL HYGIENE 128

### **General and Oral Pathology**

A survey of general and oral pathology with emphasis on diseases and their manifestations in the oral cavity. Recognition and detection of such deviations from normal is also studied. Writing assignments, as appropriate to the discipline, the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 131 and 133.

2 LECTURE HOURS. 2 CREDIT HOURS.



### DENTAL HYGIENE 130 Dental Materials

Introduces students to the basic concepts of material science and physical properties while gaining practical experience in the manipulation of restorative materials used in dental hygiene practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **DENTAL HYGIENE 131**

### **Oral Structures and Function**

Introduction to the microscopic, embryologic and morphologic characteristics of the cells, tissues and structures associated with the oral cavity. Emphasis is placed on the development, structure and function of periodontal tissues, external and internal morphology of the teeth and basic concepts of occlusion. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Biology 226, and Biology 227, and consent of Department Chairperson.



### **DENTAL HYGIENE 133**

### **Head and Neck Anatomy**

This course consists of lectures, readings, study of models and prosection that will introduce students to the gross anatomical structure and function of the human head and neck including the face, oral cavity, and deep structure of the face. Clinical implications and correlations will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Biology 226, and Biology 227, and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 135**

#### **Concepts of Preventive Therapy II**

Continuation of Preventive Therapy I with special emphasis on the psychology of motivation, special patient care, and specific population groups. Procedures will be introduced for developing and presenting dental health educational materials primarily to children in the school setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 112 and consent of Department Chairperson.

1 LECTURE HOUR. 1 CREDIT HOUR.



### DENTAL HYGIENE 200

### Summer Clinic

A continuation of dental hygiene theory and clinical concepts applicable to dental hygiene practice. Emphasis will be placed upon specific topics pertinent to acquiring clinical expertise. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Dental Hygiene 122 and Dental Hygiene124.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



### DENTAL HYGIENE 202

### **Critique of Dental Literature**

Introduction to the fundamental concepts and skills needed to understand, interpret and critique professional literature. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan and consent of Department Chairperson.

1 LECTURE HOUR. 1 CREDIT HOUR.



### **DENTAL HYGIENE 233**

### **Expanded Functions**

Principles and techniques utilized in comprehensive dental hygiene care. Instruction will include the mixing and placement of amalgam, composite, and other restorative materials. Special attention is paid to pain management with the use of local anesthesia and conscious sedation agents commonly utilized in the dental treatment setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and Grade of C or better in Dental Hygiene 131, and Dental Hygiene 133.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



### DENTAL HYGIENE 235 Community Dental Health I

An introduction to the current principles and issues in community health and their relationship to the delivery of dental care to the public sector. The role of the dental hygienist in the community disease prevention and health promotion activities will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 241**

### **Dental Pharmacology**

This course includes a study of principles of pharmacology and understanding of the characteristics of major drug groups and their utilization in medicine and dentistry. Emphasis is placed on developing an understanding of those drugs used for medical treatment which require treatment modification by the dentist or dental hygienist and those drugs used in dental practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Biology 227 and Dental Hygiene 121 and Dental Hygiene 123 and Dental Hygiene 128.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **DENTAL HYGIENE 243**

### Periodontics

A lecture course which includes the etiology, classification, symptomatology, diagnosis, treatment, and prognosis of periodontal disease. Emphasis will be placed on the phases of periodontics pertinent to a dental hygienist. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Dental Hygiene 121.

2 LECTURE HOURS. 2 CREDIT HOURS.

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#### DENTAL HYGIENE 250 Oral Diagnosis

An overview course given as an introduction to the art of differential diagnosis as it relates to lesions occurring in and about the oral cavity. Attention is directed to the discussion of pathology, history, radiographic and clinical appearance, prognosis and treatment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.

#### DENTAL HYGIENE 251 Clinical Dental Hygiene I

Enrichment of skills in performing oral health services in the clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Dental Hygiene 200.



### **DENTAL HYGIENE 252**

#### **Clinical Dental Hygiene II**

Enrichment of skills in performing oral health services in the clinical setting. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Dental Hygiene 251.* 

1 LECTURE HOUR AND 12 LAB HOURS. 5 CREDIT HOURS.



### **DENTAL HYGIENE 254**

### **Dental Specialties**

This course is designed to acquaint the dental hygiene student with the various dental specialties and current trends in dental treatment. Guest lecturers, who are specialists in the field, will provide pertinent information and in some cases, supervise practical experiences during clinical rotation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222, and consent of Department Chairperson.

1 LECTURE HOUR. 1 CREDIT HOUR.



### **DENTAL HYGIENE 256**

### **Community Dental Health II**

A continuation of Dental Hygiene 235 developing, implementing and evaluating a community dental health program; utilization of healthcare services, epidemiology of dental disease, healthcare financing and healthcare delivery will also be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Dental Hygiene 235.

2 LAB HOURS. 1 CREDIT HOUR.



### **DENTAL HYGIENE 258**

### **Ethics and Jurispredence**

Provides students with information on the personal and professional aspects of dental hygiene practice. Topics of discussion include: interpersonal and inter-professional communication, licensure and credentialing, elements of practice management, employment opportunities and strategies, ethics, legal responsibilities, and the professional organization. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **DENTAL HYGIENE 260**

### **Senior Seminar**

The course is a review of all material found on the national, regional and state dental hygiene board examinations. The course is designed to prepare students for the Dental Hygiene Board examinations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Dental Hygiene Program/Plan 222 and consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### DIAGNOSTIC MEDICAL SONOGRAPHY

#### DIAGNOSTIC MEDICAL SONOGRAPHY 206 Physics of Medical Sonography

The study of the physical principles of diagnostic medical sonography is the major emphasis of this course. Application of modern sonography equipment for the conduction of various procedures in highlighted. The nature, production, propagation and attenuation of sonographic waves will also be presented. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 2 LAB HOURS. 2 CREDIT HOURS.



### **DIESEL TECHNOLOGY**

#### 330TRANSPORTATION 111 Introduction to Diesel Technology

This course introduces students to the fundamentals of basic, personal and shop safety industry requirements for Diesel Tech. In this course students will learn to identify, use and care for hand and power tools commonly found in the diesel repair industry. In this course students will focus on the basic components and systems found within the Diesel industry. Students will gain an understanding of the basic movement and parking procedures of vehicles and equipment. They will also learn about the history of the industry and explore career and employment opportunities in dealerships and independent shops, from maintenance to major overhaul. Additional topics of discussion include hazardous material handling and storage.

Prerequisite(s): Eligibility for English 101 and Mathematics 107.

**3 CREDIT HOURS.** 



### **330TRANSPORTATION 112**

### **Diesel Electrical Systems I**

This course will include electrical safety practices; tool use; connecting and disconnecting techniques; direct current symbols, components, and schematics; principles of DC voltage and current; Ohm's Law; and troubleshoot, repairing and calibration of electrical/electronic systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 107. Grade of C or better in 330Transportation 111 and 113.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 113

### Introduction to Diesel Engine Construction

In this course students will learn the fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, disassembly, repair and reassembly of the engine. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligible for English 101 and Mathematics 107.



### 330TRANSPORTATION 114

### **Diesel Engine Construction I**

This course will provide students with concepts and skills required for engine construction, tune-up and troubleshooting procedures of diesel engines. Students will gain an understanding of alphanumeric coding and the integration of additional foundational skills required to identify and repair diesel engines. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 107. Grade of C or better in 330Transportation 111 and 113.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 115

### **Suspension and Steering**

This course will introduce students to the basic fundamental skills, technology, and service of automotive suspension and steering systems. Areas of studies include; diagnosis and repair of steering systems, diagnosis and repair of front suspension systems, diagnosis and repair of rear suspension systems, miscellaneous suspension and steering systems, and diagnosis and adjustment of wheel alignment. Group and individual activities engage students in problem-solving techniques and manipulative skills while completing industry related activities. Safety instruction is integrated into all activities. Students will also learn to identify and describe various steering systems used on diesel-powered vehicles and have an opportunity to inspect, diagnose, and repair steering problems. They will make needed repairs on the suspension system and perform wheel alignments. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 107. Grade of C or better in 330Transportation 111 and 113.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **330TRANSPORTATION 116**

### **Diesel Brakes**

This course is designed to provide students with an introduction to the basic principles of brake systems of diesel powered equipment. Emphasis is on maintenance, repairs and troubleshooting. The student will apply knowledge and understanding of the basic theory and operation of the brake systems, diagnose brake components for wear and usability, repair brake components by rebuilding or replacing parts, and adjust brake components. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 107. Grade of C or better in 330Transportation 111, 112, 113, 114, 115, and Physical Science 112, Diesel Engine Construction I.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 209

### **Diesel Electrical Systems II**

This course will include the study of DC resistance and conductors, principles of DC circuits, fundamentals of alternating current and semiconductors, basic electronic circuits, and digital electronics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 211

### **Diesel Preventative Maintenance**

This course introduces students to the knowledge base and technical skills for all courses in the diesel preventative maintenance and inspection concentration. Areas of study include engine system maintenance, under hood and cab maintenance, electrical/electronic systems, frame and chassis maintenance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, Mathematics 107, Introduction to Diesel Tech, Introduction to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 213

### **Diesel Engine Construction II**

This course will provide students with concepts and skills required for engine construction, advanced diagnostics of diesel engines, rebuilding and testing, repair of injection pumps and governors; troubleshooting engines and fuel system failures as well as the operation and adjustment of Cummins Pressure-Time System. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical 1, Physical Science 112, Suspension and Steering, Diesel Engine Construction I.

3 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### 330TRANSPORTATION 214 Emission Controls

This course will provide students with in-depth study of how technology is used in the trucking industry. Current emissions control systems operations, troubleshooting and repair will be thoroughly addressed. Regulatory compliance, electronic vehicle management systems diagnostics, testing and adjustments will be discussed, along with hands on electronic diagnostic systems testing. Various OEM electronic fuel systems and diagnostic software will also be discussed and used. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical I, Preventative Maintenance.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **330TRANSPORTATION 215**

### **Diesel Engine Performance**

This course will provide students with theoretical and practical applications needed for the operation, servicing, and troubleshooting of various types of diesel engines. It will include the study of diesel fuels, diesel fuel supply systems, mechanical and electronic injection systems, computerized engine controls, as well as soot particle reductions. Diagnostic tools usage and problem-solving to enhance engine performance are also incorporated in to the class. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical II, Preventative Maintenance.

### 330TRANSPORTATION 216

### Heavy Duty Drives I (Manual)

This course introduces students to power train systems used on medium/heavy duty trucks. Topics include: introduction to power trains, clutches and flywheels, powertrain electronic systems, auto-shift mechanical transmissions, power take-offs, trucks drive lines, differentials and final drives, torque converters, and automatic transmissions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical II, Diesel Preventative Maintenance.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 217

### Heavy Duty Drives II (Automatic)

This course will provide students with theoretical and practical applications of power train systems used on medium and heavy duty trucks. Areas of focus will include power take-offs, truck drive lines, introduction to power trains, clutches and flywheels, powertrain electronic systems, differentials and final drives, torque converters and automatic transmissions. Writing assignments, as appropriate to the discipline, are part of the curse.

Prerequisite(s): English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical II, Diesel Preventative Maintenance, Heating and AC, Heavy Duty Drives I (manual), Emission Controls, Engine Performance.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 218

### **Heating and Air Conditioning**

This course introduces systems used in medium/heavy duty trucks and heavy equipment. Classroom instruction on HVAC theory and operation along with local, state, and federal regulations are strongly emphasized. Topics include: HVAC safety, HVAC system theory and operation, A/C system component diagnosis and repair, HVAC system diagnosis and repair, HVAC operating systems and related controls, and refrigeration recovery, recycling, and handling procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical I, Preventative Maintenance.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### 330TRANSPORTATION 219

### Hydraulic Systems

This course will provide students with theoretical and practical applications of hydraulic principles into mobile hydraulic circuits. Students will gain an enhanced learning of basic hydraulic components including assembly and disassembly of valves, pumps and cylinders; servicing, diagnosing, and preventive maintenance procedures will be performed on trucks and heavy equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical II, Diesel Preventative Maintenance, Heating and AC, Heavy Duty Drives I (manual), Emission Controls, Engine Performance.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

### 330TRANSPORTATION 220

### Advanced Diagnostics

The Advanced Diagnostics course will challenge students and expand upon skills and knowledge learned in previous Diesel Technology-related courses. Students will perform diagnostic testing, and engage in problem-solving techniques and replicate real-world diesel maintenance and repair conditions. Topics include diagnosis and repair of emission systems, computerized engine performance systems, and advanced low and high-pressure fuel systems; proper use of advanced engine performance diagnostic equipment will be addressed. Prepares students for ASE A9 certification test. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, Mathematics 107, Introduction to Diesel Tech, Into to Diesel Engine Construction, Electrical I, Physical Science 112, Suspension and Steering, Diesel Engine Construction I, Diesel Brakes, Diesel Engine Construction II, Electrical II, Diesel Preventative Maintenance, Heating and AC, Heavy Duty Drives I (manual), Emission Controls, Engine Performance.

#### 3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

КК

### **DIET TECHNICIAN**

### **DIET TECHNICIAN 104** Fundamentals of Nutrition

Nutrition and its role in healthcare and maintenance. Study of the major nutrients in foods and how the body uses them. Nutrient composition of foods, the food exchange list system, balanced diets, the basic four food groups, ideal body weights, energy and protein requirements. Recommended daily allowances for nutrients, principles of meal planning for normal nutrition, dietary guidelines, nutrient calculations and analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

MX

### **DIGITAL MULTIMEDIA**

#### DIGITAL MULTIMEDIA 105 2D Animation

This is a studio course that investigates the principles, practices, and philosophy of both traditional and 2D digital animation. Students will develop storyboards, drawings, flip books, and short computer animations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, Art 131 recommended or taken concurrently, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### IAI/MAJOR: HW

#### DIGITAL MULTIMEDIA 115 Digital Audio

Students will be exposed to recording, editing, mixing, sound design techniques and concepts as they apply post-production and media design. The use of professional sound and editing techniques will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Computer Information Systems 120 or consent of Department Chairperson.



### DIGITAL MULTIMEDIA 121

### **3D Modeling**

This is a studio course for which primary orientation is the development of students' portfolio. The course will introduce students to 3D graphics, principles of perspective and basic principles of 3D modeling. The theory of 3D on the computer will be explored. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101 and Digital Multimedia Design 168-1, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **DIGITAL MULTIMEDIA 130**

### Principles of Design and Development for Digital Media

Introduction to fundamental design and development principles within the context of digital media production. The course covers principles of design, color theory, typography, information architecture, and layout as it applies to digital media. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Computer Information Systems 120 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **DIGITAL MULTIMEDIA 131**

### **Beginning Multimedia Design and Development**

This course is an introduction to multimedia authoring using industry standards web authoring software applications. Students will use industry standards vectors and WSYWIG development software to design and develop web and desktop applications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Digital Multimedia Design 130, and Digital Multimedia Design 168, or consent of Department Chairperson.

6 LAB HOURS. 3 CREDIT HOURS.



IAI/MAJOR: HW

### **DIGITAL MULTIMEDIA 168**

### **Computer Art I**

Students will be introduced to the concepts of computer art using representative programs and concepts from the profession. Students will be introduced to both raster paint/photo retouching programs and professional quality vector drawing programs. Students will also be introduced to the history of computer art. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100, and Computer Information Systems 120, or consent of Department Chairperson.

6 LAB HOURS. 3 CREDIT HOURS.



### DIGITAL MULTIMEDIA 179

### **Digital Video I**

Students will learn digital camcorder operation, basic shooting and lighting techniques, basic editing, storyboard creation and video production planning. The history, theory and criticism of video will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Computer Information Systems 120 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### DIGITAL MULTIMEDIA 205 Advanced Animation

This studio course is a continuation of the exploration and development of 2D animation. Students will develop observational and storytelling skills, utilizing and experimental animation techniques, including stop motion, live-action composting, cutouts, time-lapse, and drawn animation. Students will explore the use of animation as a creative tool, art form, and distinct personal language through character development, timing, movement study, camera movement, observation and soundtrack implementation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, working knowledge of Macintosh platform, Digital Multimedia Design 105 required, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

HW

#### DIGITAL MULTIMEDIA 221 3D Animation

This is a studio course whose primary orientation is the development of students' portfolio. The course will develop students understanding of 3D graphics, 3D dimensional modeling with an emphasis on movement, using systems and inverse kinematics and the use of constraints and bones. Advanced modeling will be used such as skins and mesh deformation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Digital Multimedia Design 121 and 168, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **DIGITAL MULTIMEDIA 231**

#### Intermediate Multimedia Design and Development

This course builds upon the technical and design skills learned in DMD 130 and 131. Focus in on design skills, intermediate programming skills, basic concepts of object oriented scripting, open source libraries, and designing for mobile devices. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Digital Multimedia Design 131-1, or consent of Department Chairperson.

6 LAB HOURS. 3 CREDIT HOURS.



### **DIGITAL MULTIMEDIA 233**

**Advanced Multimedia Design and Development** 

This course builds upon the technical and design skills learned in DMD 231. Focus is placed on advanced scripting and programming skills along with team-based projects. Students will develop an understanding of team roles, time management, and legal and technical considerations for completing a project. Students work in teams to design and complete a client-based web site. This will provide an opportunity to plan, design, develop, and implement solutions for web/multimedia projects requiring students to analyze, integrate, and synthesize knowledge acquired from previous course work. Writing assignments, appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Digital Multimedia Design 231, or consent of Department Chairperson.



### **DIGITAL MULTIMEDIA 268**

### Advanced Computer Art

This studio course develops an understanding of and skills in computer art at an advanced level. This course builds upon the basic skills developed in DMD 168 and explores more advanced features in both bitmap and vector painting and drawing programs. Students will learn to utilize filters, layers, channels, gradient mesh, advanced type techniques, color correction, and surface and texture creation. This course will also explore preparing images for the web and using vector and bitmap programs in tandem. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Digital Multimedia Design 168, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **DIGITAL MULTIMEDIA 279**

### **Digital Video II**

Builds upon the foundation of Digital Video I course. Students will learn advanced camera, editing, lighting, special effects, and audio techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Digital Multimedia Design 115 or Digital Multimedia Design 179, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **EDUCATION**

### **EDUCATION 101**

### Introduction to Education

This course will provide an introduction to teaching as a profession in the American education system. The course offers a variety of perspectives on education including historical, philosophical, social, legal, and ethical issues in a diverse society. It includes organizational structure and school governance. A field experience is required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

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### EDUCATION 102

### Using Technology in the Class

Prepare pre-service and in-service teachers to integrate technology, including computer and multimedia software, into pre-K through 12th grade classes. Surveys concepts of technology use, provides hands-on experience with hardware and software, and addresses human, social, and ethical issues related to the use of technology in education. Meets national and state technology standards. Writing assignments, as appropriate to the discipline, are part of the course.

### **3 LECTURE HOURS. 3 CREDIT HOURS.**



### **EDUCATION 103**

### **Students with Disabilities in School**

A survey course that presents the historical, philosophical and legal foundations of special education, as well as an overview of the characteristics of individuals with disabilities, the Individual with Disabilities Act (IDEA) and the services that are provided under this act, and the diversity of exceptional populations with implications for service delivery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Education 101, or Psychology 207.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### EDUCATION 203

### **Educational Psychology**

Assessment of aptitudes, capacities, interests, and achievements; and the educational implications of physical, emotional and social development. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201, or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS.



### EDUCATION 205

### **Introduction to Teacher Assistant**

This course is one of the requirements of the Teacher's Assistant certificate program. It is designed to provide an introduction to the rules and duties, the responsibilities and expectations of the teacher's assistant in the Chicago Public Schools (CPS). The course includes an orientation to the profession of teaching; the role of the teacher and the teacher's assistant; current trends and problems in education, particularly in the CPS. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



### **EDUCATION 208**

### School Leadership and Support Professionals

This course is one of the requirements of the Teaching, Leadership and Support Professionals AAS degree Program/Plan 055 and the Advanced Certificate Program/Plan 057. This course will examine the administrative process at educational institutions. Emphasis will be on the role of the principal and staff relations. Functions in an elementary/secondary schools and community colleges will be highlighted. In addition, school finance, planning, personnel, organizational structure, governance, and problem-solving in elementary/secondary and community colleges will be explored. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

### **EDUCATION 209**

### **Observation/Seminar Elementary Education**

Provides authentic experiences and knowledge which impact teaching in the elementary school classroom. Students will evaluate and design unit and lesson plans based on Illinois Learning Standards (ILS); review curriculum and instructional materials; shadow an entry-level elementary school leader and education support personnel; maintain an observation log; maintain a reflective journal with daily entries; and complete written reports on topics relevant to teaching and leadership support in elementary schools. This experience will be evaluated under the guidance of the classroom teacher and monitored by the college instructor. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Education 208.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



### EDUCATION 210

### **Observation/Seminar Secondary Education**

Provides authentic experiences and knowledge which impact teaching in the elementary school classroom. Students will evaluate and design unit and lesson plans based on Illinois Learning Standards (ILS); review curriculum and instructional materials; shadow an entry-level secondary school leader and educate support personnel; maintain an observation log; maintain a reflective journal with daily entries; and complete written reports on topics relevant to teaching and leadership support in secondary schools. This experience will be evaluated under the guidance of the classroom teacher and monitored by the college instructor. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Education 208.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



### **EDUCATION 256**

#### **The American Public School**

Function of the school as a social institution; organization, administration, and finance of public education and the major educational issues and trends. Designed for general education students and for prospective teachers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Science 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **EDUCATION 260**

### **Principles of Practice in Elementary Education**

Organizational procedures, curriculum, principles of classroom management, and the role of the teacher in stimulating learning. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **EDUCATION 269**

### **Practicum in Elementary Education: 16 Weeks**

Students spend 20 hours per week, under supervision, as teacher aides in primary grade classrooms, 8 or 16 weeks; course includes 2-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 102 and Child Development 107 and Education 256 and consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



### EDUCATION 277 Philosophy

Comparative study of philosophical views on the relationship of education to political institutions, social processes, material conditions and individual ideas. Designed primarily for future teachers; open to all students. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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### EDUCATION 299

### **Special Topics Education**

Special Topics in Education will be discussed. New developments in research and practice, including the use of technology in the classroom will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

1-4 LECTURE HOURS. 1-4 CREDIT HOURS.



### **ELECTRONICS**

### ELECTRONICS 116 Basic Electronics DC/AC

Beginning course covering fundamentals in advanced electronics; basic laws of alternating and direct current circuit theory and operation of electronics devices and circuitry; including operation of modern electronic test equipment in practical laboratory application. This course covers essentially the same material as covered in Electronics 101 and Electronics 102 but in an accelerated, one semester approach. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chair.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.

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### ELECTRONICS 206 Digital Circuits and Systems

Covers the analysis and design of digital circuits and digital systems. Includes digital logic, 7-segment displays, clocks, mono-stable multi-vibrators, flip flops, registers, analog to digital and digital to analog converters, counters, timers, sequential and state-variable logic, RAM and ROM. This course covers the same material as Electronics 118 and 119 but in an accelerated one-semester approach suitable for a 200-level course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in ELECTRN 116, or consent of Department Chairperson. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



IAI/MAJOR: TR

### ELEVATOR

### **ELEVATOR 750**

### **Fundamentals of Print Reading**

Fundamental training in blueprint interpretation. Upon completion, students will be able to read and understand prints used in the elevator industry. Writing assignments, as appropriate to the discipline, are part of the course.



### **ELEVATOR 751**

### Material Handling: Rigging/Hoisting

This course is designed to introduce students to the fundamentals of rigging and hoisting. Topics of discussion include the principle of handling and storing materials and how to properly use the tools for riggings and hoisting. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



### ELEVATOR 752

### **Basic Electricity**

This course introduces information on basic electricity. Student will learn how to apply basic math skills to the needs of the elevator industry and properly use mechanical and electrical measuring devices. Instruction provided on how to interpret graphs of simple electrical concepts and safe work practices. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 4 LAB HOURS. 4.5 CREDIT HOURS.



### **ELEVATOR 753**

### Meters

This course is designed to introduce students to the various measuring devices used in the elevator industry.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



### **ELEVATOR 754**

### Hydraulics

This course covers operation and basic hydraulic troubleshooting used in the elevator industry. Topics includes instruction on different types of hole drilling; welding procedures for the cylinder and plumbing the jack; installing the power and connecting pipe lines, car sling and cab assembly; and temporary car operation.



### ELEVATOR 755

### **DC Generator and Motors**

This course provides in-depth information on the types of DC generators and motors in the elevator industry. Topics include maintenance and services of these units and the various components of DC generators and motors.

1 LECTURE HOUR AND 1 LAB HOUR. 1.5 CREDIT HOURS.



### **ELEVATOR 756**

#### **Basic Elevator Solid State Electronics**

This course is designed to give students information on the electrical concepts and applications used in the elevator industry. The course also covers how to properly use mechanical and electrical measuring devices. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### ELEVATOR 757 Circuit Tracing

The procedures that must be followed to successfully perform circuit tracing currently in used in the elevator industry are covered in this course. Students learn systematic methods for diagnosing system malfunctions and analyzing control circuitry to efficiently locate trouble source. Instruction also provided on basic relay components, logic reasoning applied to circuits and measuring current with a multimeter.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **ELEVATOR 758**

### **Elevator Industry Safety Fundamentals**

This course introduces students to some of the main OSHA standards and provides information to assist students in using and interpreting the Code of Federal Regulations, intended to increase workplace safety awareness and compliance. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **ELEVATOR 759**

### Machine Room/Overhead Installation

Allows students to learn the proper job layout plans for the machine and machine room accessory installation. Topics include car and counterweight assembly, installation and alignment of deflector and secondary sheaves; and the types and classification of machines, governors, selectors, controllers, rope construction, enclosures used in relations to the elevator industry.

1 LECTURE HOUR. 1 CREDIT HOUR.



### ELEVATOR 760

### Car/Counterweight Assembly/Reroping

This course examines procedures for the elements of car and counterweight assembly of car slings and platforms, car top accessories counterweight frames and components, types of ropes construction, and the handling and reparation of ropes, hoist governor, and compensation rope installation is explored and practice. **1.5 LECTURE HOURS AND 1 LAB HOUR. 2 CREDIT HOURS.** 

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### ELEVATOR 761

Pit Structure and Guide Rails Designed to provide students in the elevator industry with the fundamental

knowledge and skills related to pit structure and installation of guide rails.

2 LECTURE HOURS. 2 CREDIT HOURS.



### ELEVATOR 762

### **Doors and Operators**

The methods and procedures used in the elevator industry to install, adjust, and construct elevator doors and gates for passenger, freight and dumbwaiters entrances. Writing assignments, as appropriate to the discipline, are part of the course.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

### **ELEVATOR 763**

### **Construction Wiring Fundamentals**

This course is designed to educate those in the elevator industry on the current terminology for the various types of electrical fittings; how to prepare the elevator to run properly; to plan and properly install raceway duct and conduit. Writing assignments, as appropriate to the discipline, are part of the course.

**2 LECTURE HOURS. 2 CREDIT HOURS.** 



### **ELEVATOR 764**

### **Escalator and Moving Walks**

This course allows students to learn the mechanical components; how to interpret wiring and installation drawing; and the installation procedures for escalators and moving walks.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



### **ELEVATOR 765**

### **Elevator Maintenance**

This course is designed to educate those individuals in the elevator industry on the system components and requirements to safely perform routine maintenance and repairs.

1 LECTURE HOUR AND 1 LAB HOUR, 1.5 CREDIT HOURS.



### **ELEVATOR 766**

### **OJT-Technical Concentration I**

This course is designed to provide an organized program for apprentices to practice and develop the skills performed by an elevator constructor. Materials covered include: safety procedures, interpretation of drawings and layout, industry terminology, materials, equipment, and tools. Writing assignments, as appropriate to the discipline, are part of the course.

4 LAB HOURS, 2 CREDIT HOURS,



### **ELEVATOR 767**

### **OJT-Technical Concentration II**

The course provides a continuation and completion of the first year of apprentice training in the elevator constructor industry. Apprentice will continue to cover related information about safety procedures; proper usage of tools, equipment, and materials; how to interpret drawings and layouts in a practice setting.

Prerequisite(s): Grade of C or better in Elevator 766.

4 LAB HOURS, 2 CREDIT HOURS,



### **ELEVATOR 768**

### **OJT-Technical Concentration III**

This course is designed to prepare apprentices for the first phase of the second year of on-the-job training in the elevator constructor industry. Apprentice will continue to cover information about safety procedures, tools, equipment, and materials; develop required skills in working with electricity, meters, and DC generator and motors.

Prerequisite(s): Grade of C or better in Elevator 767.

4 LAB HOURS, 2 CREDIT HOURS,



#### **ELEVATOR 769 OJT-Technical Concentration IV**

Elevator construction apprenticeship training IV.

Prerequisite(s): Grade of C or better in Elevator 768. 4 LAB HOURS, 2 CREDIT HOURS,

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### **ELEVATOR 770**

### **OJT-Technical Concentration V**

This course is designed to prepare third-year apprentices for training in the elevator constructor industry. Apprentices will develop skills in a practical setting in such areas as: hydraulics, door installation, wiring installation and escalators and moving walkwavs.

Prerequisite(s): Grade of C or better in Elevator 769.



**ELEVATOR 771** 

### **OJT-Technical Concentration VI**

This course is a continuation of Elevator Constructor Apprentice Training V. Apprentices in this phase of training will continue to develop the skills and perform the tasks required of a third-year apprentice in the elevator constructor industry.

Prerequisite(s): Grade of C or better in Elevator 770.

4 LAB HOURS, 2 CREDIT HOURS,



#### **ELEVATOR 772 OJT-Technical Concentration VII**

This course is designed to prepare fourth-year apprentices for training in the elevator constructor industry. Apprentices will develop skills in a practical setting in such areas as: solid state electronics, relay logic, circuit tracing, and elevator maintenance.

Prerequisite(s): Grade of C or better in Elevator 771.

4 LAB HOURS, 2 CREDIT HOURS,

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### **ELEVATOR 773**

### **OJT-Technical Concentration 8**

This course is a continuation of Elevator Constructor Apprentice Training VII. Apprentices in this phase of training will continue to develop the skills and perform the tasks required of a four-year apprentice in the elevator constructor industry.

Prerequisite(s): Grade of C or better in Elevator 772.

4 LAB HOURS. 2 CREDIT HOURS.



### **EMERGENCY MEDICAL TECHNICIAN**

### **EMERGENCY MEDICAL TECHNICIAN 100**

**Emergency Medical Technician: First Responder Training** Development of basic skills in patient assessment and emergency medical care procedures required for minimizing patient suffering and the prevention of further injury. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **INFORMATION SUBJECT TO CHANGE**

### **EMERGENCY MEDICAL TECHNICIAN 101**

### **Emergency Medical Technician: Basic**

This course provides training to recognize the nature or extent of a patient's condition, administer appropriate emergency medical care to stabilize their patient's condition and transport him/her safely to the proper medical facility. This course follows United States Department of Transportation (DOT) guidelines for EMT-B Training. Students will receive appropriate in-class clinicals in addition to the course lecture, CPR training/certification and ten (10) hours working in a hospital clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 6 LECTURE HOURS AND 4 LAB HOURS, 8 CREDIT HOURS,

### **EMERGENCY MEDICAL TECHNICIAN 221** Essentials of Paramedic Medicine I

This course introduces students to the roles of the paramedic. The content focuses on the introduction, assessment, management and stabilization of various patient conditions. This course follows the United States Department of Transportation Guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Successfully complete the Paramedic Program Application and Entrance Process; Concurrent enrollment in EMT 222 and consent of Department Chairperson.

9 LECTURE HOURS. 9 CREDIT HOURS.



### **EMERGENCY MEDICAL TECHNICIAN 222**

### Paramedic Medicine Practicum I

This course provides students the opportunity to focus on the integration of the principles learned in EMT 221 and apply this knowledge into practical application. Includes: direct patient care; patient simulation, clinical rotations and ambulance ride time. This course follows the United States Department of Transportation Guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in EMT 221 and consent of Department Chairperson. 2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



#### **EMERGENCY MEDICAL TECHNICIAN 223**

### **Essentials of Paramedic Medicine II**

This course provides continued instruction which was introduced in EMT 221. The content focuses on the assessment, management and stabilization of various patient conditions. This course follows the United States Department of Transportation Guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in EMT 221 and 222, concurrent enrollment in EMT 224 and consent of Department Chairperson.

9 LECTURE HOURS. 9 CREDIT HOURS.



### **EMERGENCY MEDICAL TECHNICIAN 223**

### **Essentials of Paramedic Medicine II**

This course provides continued instruction, which was introduced in EMT 221. The content focuses on the assessment, management and stabilization of various patient conditions. This course follows the United States Department of Transportation Guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in EMT 221 and 222, concurrent enrollment in EMT 224 and consent of Department Chairperson.

9 LECTURE HOURS. 9 CREDIT HOURS.



#### EMERGENCY MEDICAL TECHNICIAN 224 Paramedic Medicine Practicum II

This course provides students the opportunity to focus on the integration of the principles learned in EMT 221, 222 (and concurrent course 223) and apply this knowledge in practical application. Includes: direct patient care; patient simulation, clinical rotations and ambulance ride time. This course follows the United States Department of Transportation guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in EMT 221 and 222, concurrent enrollment in EMT 223 and consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



#### EMERGENCY MEDICAL TECHNICIAN 227-1 Paramedic Medicine Field Internship

This course provides students the opportunity to integrate, synthesize and apply the knowledge gained in EMT 221, 222, 223 and 224 toward in field situations. The student will work under the direct supervision of Paramedic Preceptors and will work with assigned Resource Hospitals as well as the Course Coordinator. This course will involve ambulance ride time. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in EMT 221, 222, 223 and 224 and consent of Department Chairperson.

3 LECTURE HOURS AND 6 LAB HOURS. 6 CREDIT HOURS.



#### EMERGENCY MEDICAL TECHNICIAN 250 EMS Instructor

This course is designed to provide students with those skills necessary to successfully complete any of the Department of Transportation National Highway Traffic Safety Administration EMS courses. The course provides a solid foundation in learning theory, yet moves directly into hands-on application. With the emphasis on practical skill development, instructor trainees will complete the course with the confidence that they can successfully teach any course in the National Standard Curricula for which they are technically qualified. Successful completion of this course enables the participant to acquire state recognition as an EMS Lead Instructor. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

### ENGINEERING

### ENGINEERING 100

### **Elements of Engineering Drawing**

Drawing survey course for students in technical and engineering science major programs. Study of more advanced software "AutoCAD Mechanical Program"; also draw geometric figures, multi-view drawings, pictorial drawing, charts and graphs with emphasis on graphic elements of machine parts drawing. Writing assignments, as appropriate to the discipline, are part of the course.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

### **ENGINEERING 110**

### Introductory Drafting

For students in non-technical and non-engineering science major programs. Learn to use "AutoCAD general program" to draw geometric figures, multi-view drafting, pictorial drawing, charts and graphs. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



### ENGINEERING 111

### Introduction to the Engineering Profession

History of engineering profession, engineer's role in a technological society, his/ her work, and the relationship of engineering to other professions. Includes study of general and related areas, ethics and responsibility of engineers and guidance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in ENGR 110, or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **ENGINEERING 115**

#### **Engineering Communications: Blueprint Reading**

For students in technical and non-technical curricula; principles and practices involved in interpretations of engineering graphics communications; emphasis on machine and structural graphic communications. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



### **ENGINEERING 131**

### **Engineering Graphics and Introduction to Design**

Graphics, both manual and computer-aided drafting and design. Introduction to design techniques in graphics and multi-view drawing, auxiliary views, selecting, tolerance dimensioning, and technical sketching. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): ENGR 111 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### **ENGINEERING 132**

### **Descriptive Geometry**

Theory of projections. Solution by graphical methods of problems concerning the relation of points, lines, planes, and surfaces. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in ENGR 131, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING 165

### **Current Engineering Topics**

Study of current topics including pollution control, transportation systems, water recycling, computer applications, automation and engineering analysis of these problems. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



### ENGINEERING 190

### **Computer Applications in Engineering**

FORTRAN or C with emphasis in engineering and scientific programming languages such as FORTRAN and APT, with emphasis on engineering problems encountered in design and manufacturing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Mathematics placement test, or credit in Mathematics 207 and Engineering 131.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **ENGINEERING 202**

### **Advanced Drafting and Basic Machine Design**

Application of fundamental stress analysis to design of complete machine units involving machine elements such as shafts, springs, gears and screws, mechanical properties of materials and their significance in design; and classification of fits, specification of materials in use, and the manufacturing processes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in ENGR 131, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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### ENGINEERING 206

Elements of Mechanics: Statics

Rigid bodies, fluid statics, friction, moments of inertia, centroids, and virtual work. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 235 and Mathematics 208 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

DA

### ENGINEERING 208

### Strength of Materials for Architecture

Concepts of stress and strain relationships; analysis of elementary stress distributions and deformations; study of axial loading, shear and bending moment diagram, and bending theory application. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Engineering 206.

3 LECTURE HOURS AND 3 LAB HOURS. 3-4 CREDIT HOURS.



### **ENGINEERING 215**

### **Electrical Circuit Analysis**

Basic electric circuits, Nodal and Mesh analysis. Voltage and current laws, circuit analysis techniques and superposition. Operational amplifiers. RL, RC, and RLC circuits. Frequency response, resonance, AC power analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 236, Mathematics 209 and credit or concurrent enrollment in Mathematics 210 (Differential Equations).

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



IAI/MAJOR: DA WR

### **ENGINEERING 250**

### **Engineering Projects**

Projects of experimental and analytical nature to stimulate creativity; recommended scheduling and integrating subject material with selected engineering courses. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in ENGR 202, or consent of Department Chairperson. 1-2 LECTURE HOURS. 1-2 CREDIT HOURS.



### **ENGINEERING AND INDUSTRIAL**

### ENGINEERING AND INDUSTRIAL TC1 103 Photography

This course is designed to teach the principles and practical application of photography related to the use of the darkroom, exposure developing and printing process. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.

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### ENGINEERING AND INDUSTRIAL TC1 300

Introduction to Computer-Aided Design

This course introduces students to the use of the microcomputer for computeraided design and drafting, using measuring instruments, special perception workpiece scales. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC1 301 Computer Numeric Control Operations

Students are provided the opportunity to learn the operations and set up of CNC controlled vertical mills and CNC controlled lathes. Writing assignments, as

appropriate to the discipline, are part of the course. 2 LECTURE HOURS AND 3 LAB HOURS . 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC1 302 Computer Numeric Control Programming II

This course provides knowledge and skills needed for entry level employment in CNC programming, as well as advanced programming dealing with the lathe and mill. Programming of complex parts with the aid of a computer is also part of this course. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC1 303 Computer Numeric Control Programming II

This course provides advanced part programming dealing with the lathe and mill. Programming of complex parts with the aid of a computer. Writing assignments, as appropriate to the course are part of the course.

Prerequisite(s): Grade of C or better in 332ENGR 302.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC1 304 CAD/CAM Numerical Control

This course is designed to acquaint students with NC part programming as it applies to a CAD/CAM system. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### **ENGINEERING AND INDUSTRIAL TC1 305**

### Introduction to Computer Applications in Manufacturing

This course reviews the mechanical elements of English and provides practical applications of traditional reading, writing, spelling and punctuation skills. In addition, it presents the fundamental concepts of computer information system as it applies to micro-computers in the manufacturing field. Students will be introduced to specialized software formats in word processing, spreadsheets, databases and graphics. The course includes "hands on" experience using a variety of software employed in the manufacturing field. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.

WR

### ENGINEERING AND INDUSTRIAL TC1 539 Metallurgy

This course provides the trainee with basic knowledge in the composition, structure and selection of steel and other metals used in modern machining processes. Emphasis is placed on the common properties of metals such as: density, ductility, tensile strength and hardness, as well as showing how some metals respond to heat treatment processes. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.

WR

### **ENGINEERING AND INDUSTRIAL TC1 715** Introduction to Hand and Power Tools

This course will enable students to identify, maintain, and illustrate proper handling and care of the various hand and power tools. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC1 761 Machine Shop Mathematics

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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### ENGINEERING AND INDUSTRIAL TC1 762 Machine Shop Mathematics II 3 LECTURE HOURS. 3 CREDIT HOURS.

KK

### ENGINEERING AND INDUSTRIAL TC1 763 Machine Shop Mathematics III 3 LECTURE HOURS. 3 CREDIT HOURS.

КК

### ENGINEERING AND INDUSTRIAL TC1 764 Machine Shop Technology



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

ENGINEERING AND INDUSTRIAL TC1 765 Machine Shop Technology II 4 LECTURE HOURS. 4 CREDIT HOURS.



ENGINEERING AND INDUSTRIAL TC1 766 Machine Shop Technology III 3 LECTURE HOURS. 3 CREDIT HOURS.



ENGINEERING AND INDUSTRIAL TC1 767 Blueprint Reading I

2 LECTURE HOURS. 2 CREDIT HOURS.



### **ENGINEERING AND INDUSTRIAL TC1 770**

### Machine Tool Operation I

Introduction to basic machine tool operations, including band saws, engine lathes, drill presses, milling machines, grinding of drill and tool bits, bench work and related layout work and inspection. Writing assignments, as appropriate to the discipline, are part of the course.

### 9 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC1 771 Machine Tool Operation II

The opportunities and requirements associated with various specialized machining occupations are introduced in this course. Emphasis is placed on occupational safety and health requirements, employer/employee relations, employment opportunities. Materials, set-up tools and production economics are also emphasized in relation to a variety of machining processes. Writing assignments, as appropriate to the discipline, are part of the course.

9 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC1 777 Statistical Process Control

This introductory course provides an overview of quality as it applies to producing quality products and services. Students learn the terminology and techniques necessary to control the processes and systems, including the control of procured materials, equipment and services. The course starts with the history of quality control, standards, inspection, calibration, preventative maintenance, systems and OSHA standards. Production parts will be used to calculate the measured dimensions and determine quality compared to the standard (usually a print or other documents). These skills will be applied to the lab portion of the program. Writing assignments, as appropriate to the discipline, are part of the course.

### **3 LECTURE HOURS. 3 CREDIT HOURS.**



### ENGINEERING AND INDUSTRIAL TC1 779 Internship

The goal of the internship is to gain on-the-job experience as a machinist or computer numerical control machine operator. The internship introduces a student to work only after 75% of the course work has been completed. The internship gives the company an opportunity to observe the intern's work skills. The intern will most likely be an assistant to a CNC operator or do other machine work until basic work procedures are learned. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

**5 LAB HOURS. 1 CREDIT HOUR.** 



#### ENGINEERING AND INDUSTRIAL TC6 101 Machine Trades Blue Reading

This course is designed to study the principles, which are essential for visualization and training in the interpretation of blueprints and sketches of machine parts. Attention is given to representations of common machine processes, special forms of dimensioning, sections, auxiliary views, symbols, surface finishes and other drafting and design principles. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENGINEERING AND INDUSTRIAL TC6 102 Machine Shop I

This course is designed to present students with an introduction to machining and machine shop practices. Study topics include hand tools, measurement, cut off machines, drilling machines, taps and dies, turning machines, milling machines and general safety. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 101.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.

DA

### ENGINEERING AND INDUSTRIAL TC6 103 Machine Shop Mathematics I

This course is designed to provide students with the basic principles of mathematics with application that relate to typical machine shop problems. Subjects to be studied include the review of fractions, decimals, measurement, ratios, proportions, and percent. An introduction to algebra, measuring systems, precision and accuracy as they relate to machining will also be included in the course. Electronic calculators required for this course. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENGINEERING AND INDUSTRIAL TC6 106 Machine Shop II

This course is designed as a continuation of material and information presented in Machine Shop I. Additional topics of study include advanced operations on the lathe and vertical milling machine, heat treating and materials usage. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 102.



#### ENGINEERING AND INDUSTRIAL TC6 201 CAD/CAM Principles

This course will introduce students to the role of computers used in design and manufacturing processes. Individuals responsible for selection implementation, integration and use of a CAD/CAM system as it relates to an existing manufacturing environment should benefit from this course. Topics covered include the role of computers in modern manufacturing and the selection of CAD/CAM systems for special uses. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENGINEERING AND INDUSTRIAL TC6 202 Technical Drafting I

This course is designed as an introductory course in basic drafting for those individuals interested in enrolling into the CAD/CAM specialty. Information concerning the tools and techniques of the drafting profession are presented. Topics covered include: Geometric constructions, multiviews, sections, dimensioning and tolerancing, along with pictorial drawings. Student must furnish basic required equipment used in the class. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 203 AutoCAD I

This course is designed to introduce students to the use of the microcomputer for the aided design and drafting. Software to be emphasized in this course will be AutoCAD Release II provided by Autodesk, Inc. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 202.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC6 204 Introduction to Intergraph Microstation I

This course will introduce students to the Intergraph Microstation CAD system, a PC version of the popular CAD software. Topics include two and three-dimensional modeling, drawing on various levels, dimensioning and related topics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 202.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 206 CAD/CAM Numerical Control

Computer-Aided Design and Manufacturing processes are discussed and implemented in this course. Students will be given the initial opportunity to draw up manufacturing piece parts in the CAD lab environment. Numerical control instruction necessary to drive a simple 3 axis machine tool to make these parts, will be presented in the Computer-Aided Manufacturing (CAM) environment. This activity will take place in the Precision Metalworking program area. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 203.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 207 CAD/CAM CNC Machining

This course will introduce students to the Computer-Aided Design/Computer Assisted Manufacturing/Computer Numerical Control process used to produce a machine part on a miniature milling machine. Information concerning, producing a dimensional CAD drawing in the DXF format; identifying cutting parameters and tool paths in a NC program; and verifying, then running the program to produce the machine part, will be presented. Students will learn to use various programming standards and modes in the process of manufacturing a piece part. As a result of this course, students will gain knowledge on the integration of computer-aided design into the computer assisted manufacturing process. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 203.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC6 208 Intergraph Microstation II

This course is a continuation of Intergraph Microstation I and prepares students to use all the capabilities of the Intergraph software including two and three dimensional modeling, drawing on various levels of geometry and converting designs into engineering drawings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 204.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC6 209 AutoCAD II

This course is a continuation of AutoCAD I and prepares students to use all the capabilities of AutoCAD software including 3D, menus, MARCos, Introduction to Auto-LISP, Advanced DOS, and third party software. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 203.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC6 210 AutoCAD III

This course is designed to introduce students to advanced 3D modeling using industry standards CAD software (AutoCAD). Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 209.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 500 AC/Fundamentals

This course will introduce students to AC circuiting fundamentals including basic sine wave analysis, inductance capacitance, voltage and current phase relationships in AC circuits. AC problem-solving, complex rotation and application of theory will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.



### **ENGINEERING AND INDUSTRIAL TC6 501**

### **DC/Fundamentals**

This course will introduce students to DC circuitry fundamentals including static electricity, resistance, power, network theorems, and network solutions and magnetism. Various aspects of DC theory and problem-solving activities will be conducted in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 502

**Electrical Wiring** 

This course will introduce students to electrical wiring, repair and construction techniques in a laboratory setting. Students will also acquire proficiency in the identification and use of various electrical components associated with wiring activities. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### **ENGINEERING AND INDUSTRIAL TC6 503**

### **Applied Mathematics**

This course introduces students to the use of fractions mixed numbers, decimals, order of operations, ratio, proportion and percent problems as they relate to industrial maintenance activities. Measurement and graphical representation will be explored and the skill of estimating and solving word problems will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



### **ENGINEERING AND INDUSTRIAL TC6 504**

### Introduction to Pneumatic Technology

This course in pneumatic technology will teach students how air is harnessed as a source of power to do work. The pneumatic trainer will be used to illustrate how pneumatic circuits are used in real-life and industrial applications. Students will also learn how to use a variety of pneumatic instruments, components and systems through a series of enjoyable and interesting experiments. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 505 Solid State Fundamentals

This course will focus upon the use of discrete solid state devices in electronics. Topics on instruction will include: semi conduction, diodes, optoelectronic devices, DC and small signal analysis of bipolar transistors and FETS, power amplifiers, tuned amplifiers, frequency response and other associated electronic devices. The theory and application of solid state electronics will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course. **2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.** 



### ENGINEERING AND INDUSTRIAL TC6 506 Industrial Motors

This course will introduce students to the principles and applications of electric motors used in industry. Topics to be studied include: motor and generator fundamentals, single and three-phase AC motors, DC and universal motors, stepper motors, servo motors, motor load characteristics, motor specifications and ratings, efficiency characteristics, motor specifications and ratings, efficiency characteristics and protective devices and testing and troubleshooting procedures for motors. The theory and application of motors used by industry will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 503 and 432 Engineering 500 and 432 Engineering 501. 2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 507 Industrial Controls

This course will introduce students to the AC power control system used in the industry. Topics to be studied include: ladder diagramming, motor starters, relays, timers, solid state motor controls, photo electronic and proximity control devices and an introduction to programmable controllers. The theory and application of industrial controls will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 503 and 432 Engineering 506.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 508 Digital Electronics Fund

This course will introduce students to electronic digital fundamentals through the study of combinational and sequential logic circuits. Topics of study will include Boolean algebra, number codes, latches, flip-flops, counters and shift registers. The theory and application of digital electronics will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): 432 Engineering 503.* 

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.

### ENGINEERING AND INDUSTRIAL TC6 509 Industrial Programmable Controllers

This course will introduce students to the basic operations of programmable controllers, central circuit programming and industrial programmable controller applications used in automated manufacturing. The theory and application of programmable controllers will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 503 and 432 Engineering 505.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



### ENGINEERING AND INDUSTRIAL TC6 510 Industrial Hydraulics

This course will introduce students to the basic concepts of hydraulics and its applications in an industrial setting. A hydraulics laboratory trainer will be utilized to help students learn hydraulics through the use if a variety of test instruments, gauges, components and control systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 503.



### **ENGINEERING AND INDUSTRIAL TC6 511**

### Introduction to Industrial Maintenance

This is an introductory course designed to provide an introduction and overview of the area of Industrial Maintenance. Topics to be presented include Industrial Maintenance activities, diagnosis, troubleshooting and repair, automated system applications, manufacturing processes and employment requirements. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



### **ENGINEERING AND INDUSTRIAL TC6 512**

#### Internship

Placement on the job monitored by supervisor will introduce students to the real world of work. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test and 432 Engineering 500 and 432 Engineering 501 and 432 Engineering 513.

10 LAB HOURS. 2 CREDIT HOURS.



### **ENGINEERING AND INDUSTRIAL TC6 515**

### **Principles of DC/AC**

This course will introduce students to DC and AC circuiting fundamentals including current and voltage resistive elements, Ohm's law, series, parallel, and seriesparallel DC and AC circuits analysis, conductors and insulators, basic electric measurements instruments, capacitors, magnetic circuits and electromagnetism, inductance, sinusoidal alternating current and voltage, and various types of transformers. Various aspects of DC and AC theory and problem-solving activities will be conducted in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 432 Engineering 503.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### HENGINEERING AND INDUSTRIAL TC6 516 Quality Assurance

This introductory course provides an overview of quality assurance as it applies to producing products and services based primarily upon processes and systems, and including the control of procured materials, equipment and services. It will include an overview of the history of quality assurance, standards, inspection, calibration, preventative maintenance, systems and OSHA standards. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



### **ENGINEERING AND INDUSTRIAL TC6 517**

### **National Electric Code**

This course in the National Electronic Code (NEC) helps students understand how the NEC is constructed, how to read the code, from beginning students to experienced electricians. A series of enjoyable lectures that clarify confusing and seemingly conflicting rules from the 1996 NEC. Writing assignments, as appropriate to the discipline, are part of the course.

### 2 LECTURE HOURS. 2 CREDIT HOURS.



#### ENGINEERING AND INDUSTRIAL TC6 518 Introduction to Power Systems

This course will introduce and develop students' critical thinking process, enabling them to reach a sound understanding of a broad range of topics related to power systems, while motivating their interest in the electrical power industry. Both theory and modeling are developed from simple beginnings so that students can be readily extended to new and complex situations. The course renews basic phasor concepts, single phase, as well as three phase circuits, power transformers, transmission lines parameters, power system control, including turbine-generator controls and multi machine stability. Writing assignments, as appropriate to the discipline, are part of the course.

### 2 LECTURE HOURS. 2 CREDIT HOURS.

DA

### ENGLISH

#### ENGLISH 98 Composition

Elements of reading, writing and speaking basic English. Writing assignments, as appropriate to the discipline, the course.

Prerequisite(s): Eligibility for English 98 determined by COMPASS test scores or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENGLISH 100

### Basic Writing Skills

Emphasis on individual expression in paragraph form, sentence clarity through knowledge of sentence structure, and correct word forms. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, or Grade of C or better in English 98, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENGLISH 105

### **Business Writing**

Fundamentals of basic forms of business correspondence. Writing assignments, as appropriate to the discipline, the course.

Prerequisite(s): Grade of C or better in English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



### ENGLISH 107

### **Report Writing**

Letters and reports, methods of collecting and organizing data, and methods of presenting facts and ideas effectively. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



### ENGLISH 121

### Communications

Ability to communicate: listen, view, talk, read, write; study of communications theory, investigation of other media: radio, television, film, records, tape, magazine, newspaper advertisements. Writing assignments, as appropriate to the discipline, are part of the course.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

### ENGLISH 127

### **Textual Analysis**

Relating thinking to reading by analysis of written materials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENGLISH 150 College Newspap

College Newspaper

News reporting and writing, feature writing, makeup and editorial work; discussion of problems of policy and newspaper. Lab work correlated with publication of college newspapers. Students will carry out all the tasks involved in the writing, publication and distribution of the college newspaper. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course</u>: Not more than an accumulated four hours will be counted toward graduation. <u>ARC: 4 times.</u> 1 LECTURE HOUR. 1 CREDIT HOUR.



### ENGLISH 151

### **News Reporting and Writing**

Survey of journalism, including news reporting and writing, feature writing, makeup and editorial work, business and advertising problems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/MAJOR: WR

### ENGLISH 152

### Introduction to Mass Communication

Scope of modern journalism and dominant theories of communication; influences of the media in today's society. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/MAJOR: HW WR

### ENGLISH 153

### Journalism

Survey of print journalism, including news, editorial and feature writing, newspaper organization, copy editing, printing technology and circulation. In addition to classroom instruction, students will practice these skills by carrying out all the tasks involved in publishing the college newspaper. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 151.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### ENGLISH 197 Communications Skills

This course provides additional support to English 101 students emphasizing critical reading, academic writing, and standard English grammar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



### ENGLISH 201

### **Advanced Composition**

Intensified work in expository and argumentative writing for students who need to improve writing skills for professional careers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 102.

3 LECTURE HOURS. 3 CREDIT HOURS.



### ENGLISH 241

### **Creative Writing**

Descriptive and narrative writing, concentrating on the writing of poetry, drama, and fiction. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



### ENGLISH 242

### Intercultural Communication

Examination of communication barriers through a study of the varieties of English, including dialects, structural and phonetic differences among ethnic groups, both present and historical, beginning with the Old English period and moving to the present. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENGLISH 243

### **Creative Writing: Fiction**

Students will understand the structure and elements of fiction and the writing process, produce fully-developed works of fiction, and demonstrate an understanding of the critical terminology of the creative writer. Student will experiment with different approaches to plot, point-of-view, dialogue, voice, sequence and structure. A minimum of 25-30 finished pages of original work is recommended. Journals, a midterm, and a final exam may also be required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101. 3 LECTURE HOURS, 3 CREDIT HOURS.



### ENGLISH 245

### **Creative Writing: Poetry**

Students will understand the structure and elements of poetry and the writing process, produce fully-developed works of poetry, and demonstrate an understanding of the critical terminology of the creative writer. Students will experiment with different approaches to form, voice, narration, imagery, translation, creative response, and revision. A minimum of 200-250 finished lines of original work is recommended. Journals and exams may also be required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



### ENGLISH 276

#### Feature Writing for Newspapers and Magazines

This course teaches feature writing for newspapers and magazines. Study and applied skill emphasize idea development for the extended feature article.

Prerequisite(s): Grade of C or better in English 101. 3 LECTURE HOURS. 3 CREDIT HOURS.



### ENGLISH 299

### **Special Topics in English**

Selected topics in English for students interested in further developing their understanding of specific authors, movements, genres, styles of writing, and forms of language; emphasis on linguistic structure, social contact, and interpretation. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability. **ARC: 4 times.** 

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



### **ENTREPRENEURSHIP (143)**

### **ENTREPRENEURSHIP 201**

### Introduction to Entrepreneurship

This interdisciplinary course introduces participants from various disciplines to the concept of sustainable entrepreneurship, a manageable process applicable across careers, work settings, and time. The course focuses on building entrepreneurial attitudes and behaviors that will lead to creative solutions within the business community and other organizational environments. Course topics include the history of entrepreneurship, the role of entrepreneurs and intrapreneurs in the 21st Century global economy, and opportunity identification. The course will examine elements of creative problem-solving, development of an enterprise concept/model. Examination of feasibility studies, and the social/moral/ethical implications of entrepreneurship. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 118, or consent of Department Chairperson.

### 3 LECTURE HOURS. 3 CREDIT HOURS.

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### ENTREPRENEURSHIP 202

### **Opportunity Recognition and Development**

Participants will learn techniques and processes leading to opportunity (value) recognition to include the assessment of target market, current economic, social, and political climate that provide value opportunities for entrepreneurial ventures. Entrepreneurial opportunities will be assessed relative to personal strengths and weaknesses, financial, professional, social, and personal goals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 118, and Grade of C or better in Entrepreneurship 201, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **ENTREPRENEURSHIP 203**

### **Entrepreneurial Accounting and Finance**

An advanced entrepreneurial course structured to expose participants to accounting and financial methodologies in order to assess or predict the financial performance of their enterprise. Building upon their business concepts or existing enterprise, participants will be introduced to core financial and managerial accounting concepts: financial analysis techniques will enable them to prepare short and longterm financial operations plans, including cash requirements for enterprise startup and ongoing operations. Participants will be trained to use computerized accounting software as part of a managerial tool kit to support operation assessment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Mathematics 118, and Grade of C or better in Entrepreneurship 201 and 202, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### ENTREPRENEURSHIP 204 Entrepreneurial Marketing and Sales

Introduces participants to marketing and personal selling strategies designed to support entrepreneurial development and growth. Participants will develop a theoretical and practical understanding of key marketing and sales strategies, including competitive product/services pricing, product/service promotion and distribution, customer and supplier qualification and the closing of sales transactions. This course will utilize the lecture and presentation format supplemented by interactive computer simulation to facilitate the participant's understanding of marketing and sales. Writing assignments, as appropriate to the discipline, are part of this course.

Prerequisite(s): Eligibility for English 101 and Mathematics 118 and Grade of C or better in Entrepreneurship 201 and 202, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **ENTREPRENEURSHIP 205**

### Law for the Entrepreneur

This course is a required course in the Entrepreneurship program. It provides students with an overview of the formation and operation of business enterprises, exposes students to types of business organization, contract law, leases, intellectual property and employment law. Students will learn about sole proprietorships, general and limited partnerships, limited liability companies and corporations, the benefits and disadvantages of each type of entity as well as the formation, dissolution and record keeping for each of these entities. Students will apply this information to business plans and will learn about other fundamental areas of law affecting business entities. Writing assignments, as appropriate to the discipline, are part of this course.

Prerequisite(s): Eligibility for English 101 and Mathematics 118, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENTREPRENEURSHIP 206

### **Entrepreneurial New Venture Start-Up**

Participants will explore and identify problems that arise in the start-up phase of an entrepreneurial venture by developing a business plan/concept for a new venture and pitching it to a panel of judges. Alternatively, participants have the option to explore and identify the obstacles to success that occur while managing and operating a business venture in a computer-simulated environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Entrepreneurship 201, 202, 203, 204, and 205, or consent of Department Chairperson.



### **ENVIRONMENTAL STUDIES (026)**

### **ENVIRONMENTAL STUDIES 101**

### Man and Environment I

Interdisciplinary study of humans, the environment and their interrelationships, including resources, processes, wastes, growth, change, values and individual responsibility and involvement; emphasis on ecology of Chicago metropolitan environment; individual in relation to urban systems and urban systems in relation to world environment. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### ENVIRONMENTAL STUDIES 102 Man and Environment II

Resource and land management, interaction of social, economic and technological systems with environment and relationship of individuals and groups to the environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Studies 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **ENVIRONMENTAL TECHNOLOGY**

### **ENVIRONMENTAL TECHNOLOGY 100**

#### Introduction to Emergency Management

This introductory course examines the principles and concepts of emergency management. It presents an overview of the various disciplines involved in preparing for emergencies resulting from many different causes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENVIRONMENTAL TECHNOLOGY 101

### Basic Skills in Emergency Management

This course provides a background in the various aspects of emergency management that would apply in any emergency. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### **ENVIRONMENTAL TECHNOLOGY 102**

### Leadership/Influence/Communication

Among the most important attributes of the successful emergency manager is the ability to fill a strong authority position that will aid them in accomplishment.

Prerequisite(s): Grade of C or better in Environmental Technology 100 and 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **ENVIRONMENTAL TECHNOLOGY 103** Introduction to Emergency Planning

The importance of planning for emergencies before they occur has long been recognized as the key to minimizing their impact on society. This course is designed to provide a basic overview of the concepts of pre-planning needed to deal with a wide range of emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100 and 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 104 Energy Systems Fundamentals

Course covers the basics of building envelopes, HVAC, lighting, insulation, glazing, plumbing and electrical systems, construction materials, and the surrounding environment. Incorporates blueprint/design fundamentals. Focus on construction engineering concepts. Introduces LEED and Energy Star programs, relevant environmental, health and safety principles, impacts, and regulatory implications. Provides a broad overview of energy use and efficiency in structures and why it matters. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 106 Introduction to Terrorism

Terrorism events present some special aspects to the world of emergency management. This course will examine the differences and similarities among emergencies resulting from terrorism versus natural disasters or accidents. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100 and 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENVIRONMENTAL TECHNOLOGY 108 Mitigation Management

The impact of many types of emergencies can be reduced by taking certain actions prior to their occurrence that will lessen the damage when the emergency occurs. This course is designed to introduce the concept of mitigation, and the activities that will accomplish it in a wide range of potential emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



### ENVIRONMENTAL TECHNOLOGY 109 Urban Agroecology

Introduction to the ecology of agriculture in urban settings addressing current local food production challenges. This course explores opportunities and efforts for more sustainable agriculture. Laboratory required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## **ENVIRONMENTAL TECHNOLOGY 111**

#### **Basic Incident Command**

The Incident Command System provides a management framework for dealing with emergency situations. This course will provide the basic knowledge of what incident command is and how it functions, as well as the importance of having a strong central authority to oversee all aspects of responding to emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 102 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

## **ENVIRONMENTAL TECHNOLOGY 112**

#### **Disaster Response and Recovery**

This course explores the basic nature of disasters, what they are, what steps must be taken to respond to them, and what is involved in recovering from them. This is a lab class that will culminate by conducting a day-long, campus wide disaster scenario response drill. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100 and 101 or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 113 Emergency Resource Management

In planning for and responding to emergencies, many varied resources will be required. This course identifies what these various resources are and how to put them to use.

Prerequisite(s): Grade of C or better in Environmental Technology 103 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **ENVIRONMENTAL TECHNOLOGY 114**

#### Renewable Energy Systems

An introductory, work-skills course on principles, concepts, applications, and installation of renewable and alternative energy technologies. Distinguishes between technologies appropriate to industrial/commercial settings versus those intended for residential structures. Covers renewable energy sources (solar, wind, geothermal, etc.) as well as alternative technologies utilized for building operations (microturbines, fuel cells, combined heat and power). Designed to prepare tradesman for the installation of various technologies. Up to five (5) off-campus field trips to alternative energy installations will be scheduled as part of this course. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### **ENVIRONMENTAL TECHNOLOGY 115**

#### Introduction to Weapons of Mass Destruction

This course provides an overview of chemical, biological, radiological, and nuclear (CBRN) weapons, and the threat of their use in terrorism events. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100 and 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **ENVIRONMENTAL TECHNOLOGY 121**

## Introduction to Hazardous Materials Management

This course is an overview of the environmental impacts resulting from hazardous materials such as asbestos, and their mismanagement. Emphasis is placed on understanding the sources responsible for soil, water, land, and air pollution and the environmental laws governing our natural resources, including asbestos. Emphasis is placed on storage and treatment practices, monitoring, sampling and handling techniques, damaging effects on humans, ecology and environment, as well as governmental regulations concerning soil, water, and air. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 122 Disaster Site Worker

A course that focuses on the skills needed by workers who respond in the recovery phase of major disasters. This course includes the requirements for obtaining the OSHA Construction Worker 10-hour card, which is required for Disaster Site Worker certification. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100 and 181 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 123 Chemical Emergency Response

This course is designed to meet the requirements of OSHA for workers that will respond to a hazardous chemical release. The course consists of the five levels of training required under 29CFR1910. 120(q). Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



### ENVIRONMENTAL TECHNOLOGY 131 Environmental Health and Safety

Introduction to health and safety principles and skills needed to conduct field operations dealing with hazardous substances and meets initial training requirements of the Occupational Safety and Health Administration for workers engaged in hazardous waste operations. Course includes fundamentals of hazard recognition, toxicology, selection, use, and limitations of personal protective equipment, and safety procedures for conducting waste site use, and limitations of personal protective equipment. It consists of lectures and demonstrations, problem-solving exercises, discussions, and field exercises. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **ENVIRONMENTAL TECHNOLOGY 141** Site Investigation and Sampling

Introduction to the techniques for monitoring and sampling of soil, water, and air. Emphasis is on site investigation procedures for contamination by hazardous materials; the use of specialized sampling equipment, its maintenance and repair, and record keeping for chain-of-custody and other documentation. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



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#### **ENVIRONMENTAL TECHNOLOGY 144**

#### **Building Systems Maintenance**

Course is comprised of seven energy efficiency topics in building operations and maintenance. Building Operators Certification is a professional development program in the energy and resource efficient operation of buildings to qualify operations and maintenance staff for certification. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### **ENVIRONMENTAL TECHNOLOGY 150** Introduction to Homeland Security

Students will learn the basic concepts, strategies, and practices of the Department of Homeland Security (DHS), for the purpose of learning how to gather and use intelligence data and its specific application in emergency operations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **ENVIRONMENTAL TECHNOLOGY 151**

#### Introduction to Environmental Laws and Policies

This course introduces students to the United States legal system, and to the doctrines and statues which regulate the production, treatment, transportation, and disposal of hazardous materials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 121.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **ENVIRONMENTAL TECHNOLOGY 160**

#### **Intelligence Analysis: Security Management**

This course examines intelligence analysis and its indispensable relationship to the security management of terror attacks, manmade disasters and natural disasters. It also explores vulnerabilities of our national defense and private sectors, as well as the threats posed to these institutions by terrorists, man-made disasters, and natural disasters. This course examines substantive issues regarding intelligence support of homeland security measures implemented by the United States and explore how the intelligence community operates. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 150, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **ENVIRONMENTAL TECHNOLOGY 163**

#### Asbestos Training for Workers and Supervisors

This course trains workers, supervisors, and contractors on an asbestos abatement job in hazard assessment, regulations, procedures, operation and maintenance planning, personal protection, and worksite safety according to AHERA and state regulations. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **ENVIRONMENTAL TECHNOLOGY 165** Asbestos Training for Inspectors

All inspectors of asbestos problems in public buildings must receive the equivalent of three days of Environmental Protection Agency approved training in asbestos control, sampling and inspection, including health effects, personal protection, regulations and liabilities, according to AHERA and state regulations. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **ENVIRONMENTAL TECHNOLOGY 170** Transportation and Border Security

This course provides students with an understanding of the variety of challenges inherent in modern transportation and border security challenges, as well as the technological solutions employed to address these challenges. The course covers the period from 9/11 to the present. The course explores the topics of seaports, ships, aircraft, airports, trains, train stations, trucks, highways, bridges, rail lines, pipelines, and buses. Students will be required to discuss the legal, economic, political, and cultural concerns and impacts associated with transportation and border security. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 160, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **ENVIRONMENTAL TECHNOLOGY 175**

#### Hazardous Material Handling and Transportation

This course is designed to explore the regulations involving the transportation of hazardous materials and waste. It includes manifesting, generator and transporter standards, Department of Transportation hazard classes, placards, labels, markings, spill response, and driver responsibilities. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 181 Emergency Response Levels I, II, III

This course will train personnel responding to hazardous materials emergencies on the requirements outlined in the appropriate OSHA regulations and NFPA standards for Levels I, II, and III. The emphasis is on hazard and risk assessment, safety, basic chemistry, personal protective equipment, spill containment and confinement, decontamination, and incident record keeping and reporting. This course will satisfy the training requirements for Emergency Response Levels I, II, and III. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### ENVIRONMENTAL TECHNOLOGY 190 Introduction to Animal Sciences

This is a survey course that will provide a firm biological and natural sciences background to students for understanding the principles important to the raising and management of livestock and companion animals. Students will have the opportunity to learn from animal industry leaders. The course is team taught to incorporate Animal Sciences instructors who are specialists in their subject matter areas. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Placement test, or Grade of C or better in English 101 and Mathematics 118 or higher.* 



## **ENVIRONMENTAL TECHNOLOGY 191**

## Introduction to Crop Sciences

This course is designed to introduce students to the basic principles of plant growth, including human and environmental influences and the theoretical and practical application of agronomic principles to crop production. It also serves as an introduction to basic agronomy revolving around crop production in the Midwest. The subject matter presented will provide an overview of major aspects of plant and soil management, pest control, and soil and water conservation issues and practices and how they affect growth and development. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Student should be capable of college entry level reading, writing, and mathematics.

#### **4 LECTURE HOURS. 4 CREDIT HOURS.**



## ENVIRONMENTAL TECHNOLOGY 192

Introduction to Soil Science

This course is designed to provide a comprehensive treatment of the basic principles of soils as they exist and interact in the environment. The course emphasizes soil as a natural body in nature, its formation, classification, chemical and physical properties. The course is designed to be equally useful to non-agricultural production students, including those studying plant science, ecology and environmental science, and to students in curricula such as agronomy, crop science, soil science, horticulture and forestry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Successful completion of high school chemistry is required.

4 LECTURE HOURS. 4 CREDIT HOURS.



## **ENVIRONMENTAL TECHNOLOGY 193**

### Introduction to Horticulture

This course is designed to offer students a general introduction to the principles of plant growth and development as they apply to the wide range of horticultural crops and the industries related to production, marketing and utilization of horticultural crops. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **ENVIRONMENTAL TECHNOLOGY 203**

## Advanced Emergency Planning

This course covers the planning required for specific emergency response actions including emergency evacuation, housing, logistics and others. Course information is presented in the context of exercise design as part of pre-planning for response. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Grade C or better in Environmental Technology 103 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 204 Residential Energy Systems

Course addresses energy systems and energy efficiency technologies utilized in single-and multi-family residential building forms. Covers systems design and installation in both new construction and retrofit projects. Introduces field auditing techniques, environmental impacts (indoor air quality, asbestos, lead, voc's, radon, waste disposal issues, etc.), worker health and safety considerations, Energy Star certification, building commissioning procedures, and local regulatory requirements. An off-campus field trip to a residential "green" building/construction site will be scheduled as part of this course. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 205 Terrorism Planning

Preparing for and responding to terrorism events requires a more focused perspective. This course will provide an overview of the special considerations

Prerequisite(s): Grade of C or better in Environmental Technology 105 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 209 Advanced Urban Agroecology

This course explores ways to apply the knowledge and skills acquired through the full sequence of classes. The student will be expected to identify a practicum location and spend 64 hours working (either with or without compensation) on projects associated with the organization and relevant to the course material. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 109 and 3 additional lab courses (Environmental Technology 190, 191, 192 193, CHEM 121, Biology 119, or Botany 201) or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.

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#### ENVIRONMENTAL TECHNOLOGY 211 Recycling and Waste Minimizing

This course presents information on reuse and recycling of non-hazardous materials that dominate the municipal waste system. Waste reduction techniques for industrial processes that generate hazardous waste constitute the second half of the course. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 212 Advanced Incident Command

This course is designed to focus on the particular management issues associated with large-scale emergencies that require response from multiple entities including the federal government. The course will include a study of the National Incident Management System (NIMS) that is activated for incidents of national significance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 111 and 112 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



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## **ENVIRONMENTAL TECHNOLOGY 214**

## Institutional Energy Systems

Course covers the types of energy systems and energy efficiency technologies in use in commercial, industrial, and high-rise buildings. Includes design, installation, testing, assessment, and operation of technologies in these structures, and details the integration of system control components. Also encompasses a synopsis of environmental, health and safety for construction and post-construction activities, Energy Star, LEED certification, other pertinent programs and regulatory aspects. An off-campus field trip to an institutional "green" building/construction site will be scheduled as part of this course. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **ENVIRONMENTAL TECHNOLOGY 215**

#### **Advanced Weapons of Mass Destruction**

This course applies the basic concepts from EM introduction to weapons of mass destruction (WMD) to specific potential situations where these weapons may be used. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Environmental Technology 100, 101, and 115, or consent of Department Chairperson.* 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## ENVIRONMENT TECHNOLOGY 221

#### **Emergency Management Operations I**

An advanced course that covers the workings of the Emergency Operations Center (EOC) during the response to major incidents. Students will fill operational roles in a simulated EOC as various drill scenarios are run. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 111 and 122 (concurrent enrollment will not qualify) or consent of Department chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### ENVIRONMENTAL TECHNOLOGY 222 Emergency Management Operations II

A field course in which students will study the application of the concepts covered in the program through direct observation of emergency response activities performed by various government agencies. Students will be placed as interns in government agencies in this course. Students registering for this course must meet all prerequisite requirements and submit to a criminal background check. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

20 LAB HOURS. 4 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 225 Psychology of Terrorism

This course examines the motivations of terrorist groups, the goals of terrorism, and the impacts of terrorism events on societies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 100, 101, 105 and 205 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 226 Disaster Psychology

This course examines the psychological impacts of disasters on both victims and responders. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **ENVIRONMENTAL TECHNOLOGY 231**

**Treatment/Storage/Disposal of Hazardous Materials** This course introduces treatment, storage, and disposal of hazardous wastes, or hazardous constituents. The emphasis is on various technologies, including treatment, land disposal, surface impoundments, solidification, incineration and disposal management. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 241 Environmental Sampling

This course is an in-depth study of the procedures and concepts used by EPA to investigate sites. Emphasis is on hazardous waste at both controlled and uncontrolled sites. The course will include the investigation of ground water, surface water, air, and soil contamination including health and risk assessments. This course is designed for students interested in the fields of environmental engineering and environmental science. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 121 and 131.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 243 Environmental Analysis

This course will introduce students to the foundations of environmental chemistry. Man-made and natural systems will be examined. Students will be encouraged to qualify and quantify the relationships between chemistry and the environment. United States Environmental Protection Agency analytical requirements will be surveyed using inductively coupled argon plasma, gas chromatography, mass spectrometry, ion chromatography and UV-Vis spectrometry, among other stateof-the-art analytical technologies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Chemistry 121 and Biology 106.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### ENVIRONMENTAL TECHNOLOGY 244 Energy Equipment Troubleshooting

A second tier course comprised of four (4) core classes in maintenance, operation, and diagnostics of electrical and HVAC systems, and two of four (2 of 4) possible electives in system specialty topics. Buildings Operator Certification is a professional development program in the energy and resource efficient operation of buildings to qualify operations and maintenance staff for certification. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## ENVIRONMENTAL TECHNOLOGY 271

#### Legal Issues in Hazardous Waste Management

This course will further students' knowledge of the legal problems and financial liabilities that may be associated with producing, handling, storage, and disposal of hazardous materials. It is designed to explore the legal aspects and ramifications in production, storage and disposal of hazardous wastes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Environmental Technology 151.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## ESL (INTEGRATED)

## ESL (INTEGRATED) 98

#### Intermediate Integrated ESL

This is an integrated reading/writing course at the intermediate ESL Level designed to increase students' receptive and productive command of written English. The focus is on grammatical structures, as well as reading and composition at the intermediate level. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of six credit hours. **ARC: 4 times.** 

Consent of Department Chairperson required for repeatability. ESL Placement test and interview, or consent of Department Chairperson.

6 LAB HOURS. 6 LECTURE HOURS.



## ESL (INTEGRATED) 99

High Intermediate ESL

This is an integrated reading/writing course at the high-intermediate ESL level designed to increase students' receptive and productive command of written English. The focus is on sentence structure, reading and authentic texts, and essay writing. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of six credit hours. **ARC: 4 times.** 

Consent of Department Chairperson required for repeatability. ESL Placement test and interview, or consent of Department Chairperson.

6 LAB HOURS. 6 LECTURE HOURS.



## ESL (INTEGRATED) 100

#### **Advanced Integrated ESL**

This is an integrated reading/writing course at the Advanced ESL Level designed to increase students' receptive and productive command of written English. There is a review of sentence structure and sentences connection; extensive reading of authentic texts, including academic ones; and frequent essay-writing. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Course may be repeated up to three times and may count for a maximum of six credit hours. <u>ARC: 4 times.</u>

Consent of Department Chairperson required for repeatability. ESL Placement test and interview or Grade of C or better in ESL Integrated 99 or ESL English 99 and ESL Reading 99, or consent of Department Chairperson.

#### 6 LAB HOURS. 6 LECTURE HOURS.



## ESL READING (137)

## **ESL READING 98**

### **Special Reading Skills**

Special reading skills for non-native speakers of English; focus is on comprehension and analysis of reading materials and study of American idioms. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4 times.</u>

Qualifying score on ESL Placement test and oral interview, grade of C or better in ESLWRIT 98 and ESL Speech 98, or consent of Department Chairperson.

3 LAB HOURS. 3 LECTURE HOURS.

#### ESL READING 99 High Intermediate Reading Skills

For students who need to improve their reading skills; efficient reading of textbooks and other materials including work in mechanics of reading, vocabulary development, comprehension, and rate of reading. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course:</u> Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4 times.</u>

Placement test, or grade of C or better ESL Reading 98, or consent of Department Chairperson.



## ESL READING 100

#### **Advanced Reading Skills**

Focus on comprehension and analysis of college-level reading materials and study of American idioms. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. **ARC: 4 times.** 

Placement test, or grade of C or better in ESL Reading 99, or consent of Department Chairperson.

3 LAB HOURS. 3 CREDIT HOURS.

## ESL SPEECH (195)

## **ESL SPEECH 98**

## Intermediate Speech

Emphasis on achieving competency required for successful pursuit of higher education: pronunciation drills, pattern drills, participation in group discussion and presentation of brief speeches. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. **ARC: 4 times.** 

Placement test, or consent of Department Chairperson and grade of C or better in ESLWRIT 98 and ESL Reading 98.

3 LAB HOURS. 3 CREDIT HOURS.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### ESL SPEECH 99

#### **High Intermediate Speech**

Emphasis on conversation, group discussion, and listening skills to improve communication to enhance academic pursuits. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course</u>: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4</u> times.

Placement test and oral interview or grade of C or better in ESL Speech 98, or consent of Department Chairperson.

3 LAB HOURS. 3 CREDIT HOURS.



#### ESL SPEECH 100 Advanced Speech

The goal of this speech class is to upgrade the oral communication skills of students whose native language is not English, and to prepare them for Speech 101. Emphasis is placed on oral presentations, as well as comprehensibility and use of conversational techniques. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. **ARC: 4 times.** 

Placement test and oral interview, or grade of C or better in ESL Speech 99, or consent of Department Chairperson.

3 LAB HOURS. 3 CREDIT HOURS.



## **ESL WRITING (135)**

#### **ESL WRITING 98**

#### **Special Grammar and Composition**

Writing skills, linguistic and idiomatic patterns are emphasized. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4 times.</u>

Placement test and oral interview; ESL Reading 98 and ESL Speech 98, or consent of Department Chairperson.

**3 LAB HOURS. 3 CREDIT HOURS.** 

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#### **ESL WRITING 99**

#### **High Intermediate Grammar and Composition**

Intensive review and refinement of grammar and composition. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable</u> <u>Course:</u> Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4 times .</u>

Placement test, or grade of C or better in ESLWRIT 98, or consent of Department Chairperson. 3 LAB HOURS. 3 CREDIT HOURS.



## ESL WRITING 100

## **Advanced Grammar and Composition**

Writing and analysis of paragraphs and essays and of logical development. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4 times.</u>

Placement test, or grade of C or better in ESLWRIT 99, or consent of Department Chairperson. 3 LAB HOURS, 3 CREDIT HOURS.



## **EXERCISE SCIENCE AND SPORTS STUDIES**

#### EXERCISE SCIENCE AND SPORTS STUDIES 101 Certified Personal Trainer Prep

This course introduces the knowledge and skills necessary to practice as a certified personal trainer for a variety of client populations, including the foundations of client interaction, the assessment of physiological, functional, and biomechanical aspects of human movement in the individual, and the design and supervision of strength and aerobic individual and group exercise programs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

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#### EXERCISE SCIENCE AND SPORTS STUDIES 102 Personal Exercise Trainer Practicum

The exercise practicum provides practical experience for students enrolled in the personal trainer program. The practicum focuses on the application and synthesis of the knowledge base skills of a personal trainer in a supervised commercial, community or clinical fitness setting in order to actively engage individuals of various ages and functional abilities. The course includes a campus-based lecture series that provides review and supplemental knowledge of the personal training profession. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Exercise Science and Sports Studies 101.

2 LECTURE HOURS AND 10 LAB HOURS. 4 CREDIT HOURS.



#### EXERCISE SCIENCE AND SPORTS STUDIES 110 Massage Therapy Practice I

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics that will be presented include Swedish massage techniques, the physiological effects and therapeutic applications of massage therapy, including the history and scope of massage practice, professional ethics, proper hygiene, and sanitation and sheeting skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 and Biology 120, or consent of Department Chairperson.

#### 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## EXERCISE SCIENCE AND SPORTS STUDIES 111

#### Integration of Massage Therapy I

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics that will be presented include the basic anatomy and physiology of the human body as it relates to the practice of massage therapy. A thorough analysis of human muscle origins, insertions and muscle origins, insertions and muscle actions specific to a standard massage routine will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120 and Exercise Science and Sports Studies 110, or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



## EXERCISE SCIENCE AND SPORTS STUDIES 120

#### Massage Therapy Practice II

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics that will be presented include the effects of a massage routine on the systems of the body, therapeutic massage procedures, continued study of muscles and body landmarks, and business skills for massage therapy practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120 and Exercise Science and Sports Studies 110, Exercise Science and Sports Studies 111, or consent of Department Chairperson.

## 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## EXERCISE SCIENCE AND SPORTS STUDIES 121

Integration of Massage Therapy II

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics that will be presented include aspects of muscular tissue, origins, insertions, and joint action of each muscle as it relates to the practice of massage therapy. Pathology of homeostatic diseases as they relate to massage therapy will be introduced during this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120 and Exercise Science and Sports Studies 110, Exercise Science and Sports Studies 111, Exercise Science and Sports Studies 120 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



## **EXERCISE SCIENCE AND SPORTS STUDIES 210**

#### Massage Therapy Practice III

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics will be presented include massage techniques of Lomi Lomi and Acupressure, body mobilization techniques of the upper extremities, business and ethics in the practice of massage therapy, and daily operations of the massage therapy practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120 and Exercise Science and Sports Studies 110, Exercise Science and Sports Studies 111, Exercise Science and Sports Studies 120 or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### EXERCISE SCIENCE AND SPORTS STUDIES 211 Integration of Massage Therapy III

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics will include the effects of a massage routine on the systems of the body, therapeutic massage procedures, continued study of muscles and body landmarks and business skills for massage therapy practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120 and Exercise Science and Sports Studies 210, or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



#### EXERCISE SCIENCE AND SPORTS STUDIES 220 Massage Therapy Practice IV

This course is designed to enhance students' knowledge, skills and ability related to entry level massage therapy practice. Topics that will be presented include evaluation of hands-on mobilization techniques, professionalism, strategies to establish appropriate clientele relationship and business practices. Students will also review for the Massage and Bodywork Licensing Exam (MBLEx). Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120, Exercise Science and Sports Studies 210 and Exercise Science and Sports Studies 211, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.

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#### EXERCISE SCIENCE AND SPORTS STUDIES 221 Integration of Massage Therapy IV

This course is designed to enhance students' knowledge, skills and ability related to advanced level massage therapy practice. Topics that will be presented include cardiovascular system impacts that massage, client assessment and data collection, clinical reasoning and treatment planning, safe and effective use of equipment and massage therapist self-care strategy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Biology 120, Exercise Science and Sports Studies 210, or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.

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## FIRE SCIENCE TECHNOLOGY

#### FIRE SCIENCE TECHNOLOGY 101 Introduction to Fire Science

History of fire science; principles of fire prevention, protecting, and extinguishing; discussion of individual career opportunities. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FIRE SCIENCE TECHNOLOGY 102 Fire Fighting Tactics

Basic procedures for suppression of fire; application to principles of building construction; coordination of human resources and equipment. Writing assignments, as appropriate to the discipline, are part of the course.



## **FIRE SCIENCE TECHNOLOGY 103**

#### **Fire Suppression Systems**

Fire suppression and protection systems, including characteristics and usage of sprinkler systems, wet pipe systems, stand pipe systems, heat detectors, smoke detectors; covers components of sprinkler systems, valves, 0.S.Y. and P.I.V. valves, spacing of sprinkler heads according to occupancy classification, temperature rating and color coding of sprinkler heads, and Fire Department support, connections and emergency involvement. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FIRE SCIENCE TECHNOLOGY 104

## Fire Suppression Apparatus

Basic principles of fire apparatus construction, operation, and maintenance; consideration of pumps, pumper procedures and tests, aerial ladders and platforms, elementary hydraulic calculations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FIRE SCIENCE TECHNOLOGY 197

#### Fire Service Orientation

Organization and operation of the fire department; handling hose, raising ladders, use of ropes, masks, and other fire service appliances; automatic fire alarm and sprinkler systems, telegraph fire alarm and code of signals. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



## FIRE SCIENCE TECHNOLOGY 198

#### **Emergency Medical Orientation**

Instruction in emergency medical care of injured persons; operation of resuscitation and other emergency medical equipment; use of emergency extrication equipment; certification in standard emergency medical practices. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### FIRE SCIENCE TECHNOLOGY 200 Fire Administration

Analysis of basic objectives, personnel management, motor apparatus, equipment, buildings, communications, alarm systems; comparison of local, state, and federal fire control agencies. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **FIRE SCIENCE TECHNOLOGY 201**

## **Fire Service Hydraulics**

Review of basic mathematics for study of properties of fluids, force, pressure and flow velocities; operation and characteristics of fire pumps; generation of fire streams and water distribution systems. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



## FIRE SCIENCE TECHNOLOGY 202

## **Building Construction for Fire Service**

Study of exterior and interior material and structural construction of buildings in relation to fire resistance, safety, and firefighting. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FIRE SCIENCE TECHNOLOGY 203

## Fire Protection Systems

Study of required standards for water supply, protection systems, automatic sprinklers and special extinguishing systems; analysis of automatic signaling and detection systems. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FIRE SCIENCE TECHNOLOGY 204

## Fire Fighting Tactics II

Study of human labor and apparatus management; types of fires requiring a unique suppression approach.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## SCIENCE TECHNOLOGY 205

## **Chemistry of Flammable Materials**

Properties and fire suppression of chemically active and hazardous materials; flammable liquids, combustible solids, oxidizers, corrosive materials. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS, 3 CREDIT HOURS.** 

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## FIRE SCIENCE TECHNOLOGY 206

Fire Codes

Study of national, building, and other codes relating to fire prevention and protection; relationship between building inspection agencies and fire prevention organizations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FIRE SCIENCE TECHNOLOGY 210 Fire Prevention Fund I

Principles of fire prevention program; planning and implementation of fire inspection; recognition of fire hazards and causes; building construction types and materials, and private protective systems. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FIRE SCIENCE TECHNOLOGY 211 Fire Prevention Fund II

Protection of public and private industrial properties against fire, explosion, lightning, and wind damage. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week.



#### FIRE SCIENCE TECHNOLOGY 212

#### **Fire Insurance Rating**

Study of multiple line insurance policy types, rate determination, claim adjustments, and types of rate schedules. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FIRE SCIENCE TECHNOLOGY 213

#### **Fire Causes and Arson Investigation**

Techniques and procedures for investigation of fires; determining origin and causes of fires; fundamentals of arson investigation; gathering evidence for technical reports; criminal procedures related to local and state statutes. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **FIRE SCIENCE TECHNOLOGY 220**

## Fire Service Training I Instructor

Methods and techniques of teaching for fire service instructors; principles of teaching adults, how adults learn, teaching procedures and methods, training aids and services, testing and evaluation; includes practice teaching and evaluation by qualified observers; course will meet requirements of the Illinois Fire Protection Personnel Standards and Education Commission for the Basic Level Instructor Certification. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



## FIRE SCIENCE TECHNOLOGY 221

## Fire Service Training II Instructor

Methods and techniques for planning, development, and conducting a Fire Service Training Program; covers objectives of a program, evaluating training, techniques of conference leadership; course will meet requirements of the Illinois Fire Protection Personnel Standards and Education Commission for the Standard Level Instructor Certificate. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in FIRE TC 220, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## FOOD SERVICE ADMINISTRATION

#### FOOD SERVICE ADMINISTRATION 222 Food Service Sanitation

Sanitation in preparation and service of food; sanitation chemicals, equipment and materials; ordinances and inspection procedures to insure sanitary dispensing of food. Writing assignments, as appropriate to the discipline, are part of the course. **2 LECTURE HOURS. 2 CREDIT HOURS.** 



## FOUNDATIONAL STUDIES ESL

## **FOUNDATIONAL STUDIES ESL 4001**

#### **English Academic Purposes I**

This is the first course of six designed for non-native speakers of English who are in preparation for college. This introduces students to the American College system and focuses on oral language development; speaking, listening, communication, reading skills, and written expression. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



#### FOUNDATIONAL STUDIES ESL 4002 English Academic Purposes II

This is the second course designed for non-native speakers of English who are preparing to enter college. This course is a continuation of oral language development–speaking, listening, and communication; reading skills, and written expression. Emphasis placed on listening skills, discussion, and vocabulary development. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES ESL 4003 English Academic Purposes III

This is the third of six courses designed for non-native speakers of English who are preparing to enter college. This course focuses on oral language development, reading, and writing proficiency, locating information, understanding elements of a college textbook, and reading graphically presented information. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times. 3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### FOUNDATIONAL STUDIES ESL 4004 English Academic Purposes IV

This is the fourth of six courses designed for non-native speakers of English who are preparing to enter college. This course focuses on oral language development, skills for reading college textbooks, skills for writing about subject area content, interpreting graphically presented information, locating and using information, and using the college library and resource center. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES ESL 4005 English Academic Purposes V

Study of the form and content of effective writing. Review of the essentials of written and spoken grammar and usage, and intensive practice in writing complete sentences, effective paragraphs and short essays/compositions. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times. 3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FOUNDATIONAL STUDIES ESL 4006

#### English Academic Purposes VI

This is the last of the six courses designed for non-native speakers of English who are preparing to enter college. This course focuses on critical reading skills, research skills, essay writing, grammar, and discussion of current events and subject areas topics. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### FOUNDATIONAL STUDIES ESL 4007 ESL: College Prep I

This is the first of six college preparation courses designed for non-native speakers of English who have completed English for Academic Purposes. Each course provides a foundation for study in college content areas. This course focuses on study skills, critical thinking and reading of historical and other non-fiction prose, and correctness of written expression. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.

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## **FOUNDATIONAL STUDIES ESL 4008**

#### **ESL: College Prep II**

This is the second of six preparation courses designed for non-native speakers of English who have completed English for Academic Purposes. This course will continue to focus on the study skills and correctness of written expression and will apply critical reading and thinking skills to literature. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FOUNDATIONAL STUDIES ESL 4009

#### ESL: College Prep III

This is the third of six concurrent college preparation courses for non-native speakers of English who have completed English for Academic Purposes. This course focuses on listening skills for academic purposes, note taking and study habits, writing to learn, and skills for intensive reading of factual matter. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times. 3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **FOUNDATIONAL STUDIES ESL 4010**

#### **ESL: College Prep IV**

This is the fourth of six college preparation courses designed for non-native speakers of English who have completed English for Academic Purposes. This course continues to focus on listening skills for academic purposes, note taking and study habits, writing to learn, and critical thinking and reading. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 



#### **FOUNDATIONAL STUDIES ESL 4011**

#### ESL: College Prep V

This is the fifth of six college preparation courses designed for non-native speakers of English who have completed English for Academic Purposes. This course focuses on lectures by visiting college professors, skills for reading science materials, academic writing, and strategies for college success. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES ESL 4012 ESL: College Prep VI

This is the last of six college preparation courses designed for non-native speakers of English who have completed English for Academic Purposes. This course focuses on lectures by visiting college professors, skills for reading psychology, sociology, political science, economics, and the humanities, and strategies for college success. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



## FOUNDATIONAL STUDIES MATHEMATICS

#### FOUNDATIONAL STUDIES MATHEMATICS 3001 Mathematics Refresher I

This course is designed for students needing a review of basic math in order to take college level math courses. This course provides a review of the rules of addition, subtraction, multiplication and division using whole numbers and decimals. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



#### FOUNDATIONAL STUDIES MATHEMATICS 3002 Mathematics Refresher II

This course is designed for students needing a review of basic math in order to take college level math courses. This course focuses on percents, fractions, and integers. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES MATHEMATICS 3003 Mathematics Refresher III

This course is designed for students needing a review of basic math in order to take college level math courses. This course will review powers and roots; basic concepts of ratio, proportion, probability, and basic geometry. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



#### FOUNDATIONAL STUDIES MATHEMATICS 3004 Elementary Algebra

This course is designed to prepare students to take college level algebra. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times. 3 LECTURE HOURS. 3 CREDIT HOURS.** 



## FOUNDATIONAL STUDIES READING

#### FOUNDATIONAL STUDIES READING 1001 Reading I

This is the first in a sequence of six courses designed to prepare high school students for college level course work. This course focuses on developmental skills essential to effective reading. Emphasis is placed on decoding, and word attack skills, and sight word recognition. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 



# FOUNDATIONAL STUDIES READING 1002

Reading II

This is the second course in a sequence of six courses designed to prepare high school students for college level course work. This course will help students develop additional skills essential to effective reading. The emphasis on decoding skills will continue. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



#### FOUNDATIONAL STUDIES READING 1003 Reading III

This is the third course in a series of six designed to help high school graduates develop skills essential to effective reading. The emphasis on decoding skills will continue. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



## FOUNDATIONAL STUDIES READING 1004

## Reading, Writing, Critical Thinking I

This is the fourth in a sequence of six courses designed to prepare high school graduates for college level course work. This course will help students increase their reading, writing, and critical thinking skills. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS, 3 CREDIT HOURS,



## FOUNDATIONAL STUDIES READING 1005

Reading, Writing, Critical Thinking II

This is the fifth in a sequence of six courses designed to prepare high school graduates for college level course work. It is a continuation of Reading, Writing, and Critical Thinking I and is designed to help high school graduates increase these skills for use in college level course content areas. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES READING 1006

## Reading, Writing, Critical Thinking III

This is the last course in a six course sequence designed to prepare high school graduates for college level work. It is a continuation of Reading, Writing, and Critical Thinking II and designed to prepare students to read across all majors content areas from a basic knowledge base. Students will gain basic content knowledge proficiency in literature, history, fine arts, geography, physical science, life science, medicine, and health. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES WRITING 2001

#### Writing Mechanics I

This course is the first in a series of four designed for students who need to learn basic writing skills required for college level analytical writing. The course focuses on sentence structure and the mechanics of writing sentences and simple paragraphs. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES WRITING 2002 Writing Mechanics II

This is course two of four for students who need instruction in basic writing skills required for college level analytical writing. The course will cover writing paragraphs; how to organize thoughts and information; examining the source of information; identifying problems of accuracy, specificity, and clarity, and writing explanations of the problem. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### FOUNDATIONAL STUDIES WRITING 2003 Writing Mechanics III

This course is designed to improve the college writing skills of each student by understanding and implementing the writing process, mastering both paragraph and essay development—intro, body, and conclusion—and other type prose and reinforcing grammar and usage skills, as well as punctuation, capitalization, and dictionary usage. Writing workshop methods will be used to enhance students' personal writing styles, improve composition abilities, and build confidence. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



#### FOUNDATIONAL STUDIES WRITING 2004 College Writing and Research Skills

This is the last course in a series of analytical writing. This course will concentrate on writing a research paper. The information presented includes choosing a topic, types and sources of data, and collecting and investigating facts and opinions about a limited topic from various sources. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

3 LECTURE HOURS. 3 CREDIT HOURS.



## FRENCH

#### FRENCH 101 First Course French

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement Exam.





## FRENCH 102

Second Course French Continuation of French 101. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or grade of C or better in French 101.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### FRENCH 103

#### Third Course French

Review and development of basic language skills, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or grade of C or better in French 102 and Consent of Department Chairperson.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## **FRENCH PASTRY**

## **FRENCH PASTRY SCHOOL 707**

## Food Service Technology

Introduces kitchen calculations, including costing and conversion, determining revenue and food cost, menu planning and pricing, cost control in a food service environment, and an overview of the use of computers in a professional kitchen. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, Reading 125, and Mathematics 98; concurrent enrollment in Culinary 721 and Culinary 723, or consent of Department Chairperson. **4 LECTURE HOURS, 4 CREDIT HOURS,** 

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## FRENCH PASTRY SCHOOL 712

#### **Baking Theory and Problems**

Instruction in formulas, new formulas and ingredients in the baking/pastry field. Evaluation of convenience mixes. Mathematics for bakers. Writing assignments, as appropriate to the discipline, are part of the course.

**5 LECTURE HOURS. 5 CREDIT HOURS.** 



## **FRENCH PASTRY SCHOOL 754**

#### Candy and Confectionery

In this course, students will learn about the history of chocolate, chocolate biproducts, tempering and handling of chocolate. They will learn to produce a wide range of chocolate candies. This class is taught using updated methods for traditional recipes with efficient production set-up. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



## FRENCH PASTRY SCHOOL 758

#### **Plated Desserts**

This course focuses on simplified and cost-effective production methods, while stressing the importance of maintaining high quality by using the freshest ingredients. Students will be exposed to refreshingly new presentations and elegant designs that will be carried out when they prepare several desserts including hot and cold, frozen desserts, fruit soups, parfaits, and a la minute desserts. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.

## КК

#### FRENCH PASTRY SCHOOL 761 Chocolate and Sugar

Students will learn about the history, tempering and the fundamentals of chocolate and sugar. They will learn the latest techniques using chocolate colors, spray gun, use of different types of molds, making cut-out decorations, silk screens, pastillage, saturated sugar, pulled and blown sugar, spun and piped, bubble, straw, pured sugar and more. All of these techniques will be applied to the several show pieces each student will create and take home. Writing assignments, as appropriate to the discipline, are part of the course.

**5 LECTURE HOURS. 5 CREDIT HOURS.** 



## FRENCH PASTRY SCHOOL 762 French Cakes and Pastries

In this course, students will learn to produce a wide variety of classical and modern French cakes suitable for restaurants, retail shops for large scale productions, using the latest assembling techniques and cost-effective production methods. These cakes will be highlighted with decorations such as silk screens, printed sponge, logos, chocolate and sugar decorations to name a few. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### FRENCH PASTRY SCHOOL 779 Safety and Sanitation

This course conveys the utmost importance of food professionals providing safe food to their customers. Students learn everything about food safety, sanitation, equipment, and food delivery. This is a comprehensive immersion into all aspects of handing food safely. The National Restaurant Association ServSafe examination will be part of this course. Student must pass this exam in order to pass the 16-week program. Those who do not pass will have the opportunity to re-take the exam. Students who pass will be eligible for city and state certification. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in French Pastry School 780, 781, 782 and 783.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### FRENCH PASTRY SCHOOL 780 Baking, Pastry and Technology

This course takes students through the technology and science of the ingredients of pasty. Students learn the differences between various dairy products and eggs, the different types of flours and sugars, and how the interactions of ingredients affect the outcome. Students learn basic skills and modeling, petit fours and party favors, as well as the historical development of celebration cakes. Students immerse themselves in the history of French pastry and cake making, the development of palate, the hierarchy of a kitchen, and an explanation of the wide variety of settings where graduates can use their craft. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in French Pastry School 779. Concurrent enrollment in French Pastry School 781, 782 and 783.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



## FRENCH PASTRY SCHOOL 781

**Cake Baking and Construction** 

This course covers all aspects of wedding, celebration, and specialty cake baking, constructing, and assembly. Recipe creations with taste and texture profile methods are covered in depth. Students learn a variety of doughs and fillings; the art of cake architecture; European classic recipes, cutting-edge creations, current trends, and sculpted cake methods; all this giving students a solid foundation necessary to create their own. Efficient production methods are taught and students will use these techniques to produce their own designs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in French Pastry School 779 and 780. Concurrent enrollment in French Pastry School 782 and 783.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



## FRENCH PASTRY SCHOOL 782

#### **Cake Decorating Techniques**

In this course students learn a wide variety of cake decorating techniques including elaborate gumpaste work, detailed piping techniques, French buttercream frosting, making rolled fondant from scratch and rolled fondant cake covering, chocolate decorations specifically tailored for cakes, pastillage and pressed sugar accents, pulled and blown sugar flowers and ribbons, mold making methods, airbrushing skills, figurine modeling and 3D sculpted cakes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in French Pastry School 779 and 780. Concurrent enrollment in French Pastry School 781 and 783.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



## **FRENCH PASTRY SCHOOL 783**

#### **Cake Business Planning**

This course provides in-depth lectures focusing on critical information needed to operate a successful wedding cake business such as pricing, customer consultation, cake portions, design, packaging, and delivery logistics. Career counseling and personal attention to each student's career goals are provided. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in French Pastry School 779 and 780. Concurrent enrollment in French Pastry School 781 and 782.

1 LECTURE HOUR. 1 CREDIT HOUR.



## HEALTH

#### **HEALTH 102**

#### **Medical Law and Ethics**

This course considers the standards of ethical conduct toward patients, colleagues and other members of the medical team. Legal responsibility, professional liability, licensing, contracts, and other applications of law in medicine will be included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into the Medical Assistant Program/Plan 0359 and Grade of C or better in Biology 120.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HEALTH 103**

#### **Medical Assisting Clinical Procedures I**

This course is designed to introduce students to basic clinical procedures in the medical office assisting field. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance in the Medical Assistant Program/Plan 0359 and Grade of C or better in Biology 120.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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#### **HEALTH 104**

#### Medical Assisting Clinical Procedures II

This course provides proficiency in performing basic skills and assist with procedures common to the medical practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health 103. 2 lecture hours and 2 lab hours. 3 CREDIT HOURS.



#### HEALTH 105

#### **Medical Careers Professional Development**

This course prepares students for the transition from student to practicing Medical Assistant by exploring professional development issues. Writing assignment, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health 103.

2 LECTURE HOURS. 2 CREDIT HOURS.

WR

#### HEALTH 106

#### Administrative Procedures

This course will explore administrative and front office responsibilities in the physician's practice or clinic setting. Emphasis is placed on clerical functions, bookkeeping procedures, preparing special accounting entries, transcription, and processing insurance claims. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health 103.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## HEALTH 107

## Pharmacology

This course introduces students to the basic skills that are performed by the medical assistant in the medical office. The course will emphasize the principles of pharmacology as they relate to medication administration in the medical office and clinic settings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into the Medical Assisting Program/Plan 0359 and Grade of C or better in Biology 120.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **HEALTH 108**

#### **Fundamentals of Ambulatory Billing and Coding**

This course covers performance of coding procedures; application of third party and managed care policies, procedures, and guidelines, including obtaining referrals and pre-certifications; and billing for services, including insurance claim forms and use of a physician's fee schedule. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into the Medical Assistant Program/Plan 0359 and Grade of C or better in Biology 120.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



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#### **HEALTH 109**

#### **Medical Assisting and Externship Practicum**

This course requires a minimum of 160 hours of supervised, non-salaried experience in a variety of healthcare settings. Students will be assigned to clinical sites. This course requires 16 practicum hours per week. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.

# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## HEALTH 250

## Health Education

Trends and issues of personal and community health; stress ways to maintain good physical and mental health; ecology, drugs, alcoholism, human sexuality, nutrition, disease and related topics. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### HEALTH 251

#### **First Aid**

Standard American Red Cross course in first aid; principles and practices of first aid for all age levels; safety and accident prevention stressed; First Aid Standard and Advanced certificates awarded to students completing the course successfully. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

## **HEALTH PROFESSIONS**

#### **HEALTH PROFESSIONS 101**

#### **Patient Care Technician Training**

This course is designed for students interested in allied health fields. The course introduces students to the healthcare delivery system, health professions, primary patient care, fundamental clinical skills and healthcare communications. Safety, healthcare professionalism, employability skills, basic infection control, HIPPA, and OSHA are also included. Completion of this course qualifies students to apply for certification as a Certified Nursing Assistant or Patient Care Technician. Students may also be able to apply for certification as a Phlebotomy technician if they complete 60 additional hours of clinical rotation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 eligibility, or consent of Department Chairperson. Completion of the H2P orientation program. Current and valid CPR Certification. Up-to-date vaccination history and/or provide documentation of exception.

4 LECTURE HOURS AND 2 LAB HOURS. 6 CREDIT HOURS.



#### HEALTH PROFESSIONS 102 Health Career Studies

This course introduces students to the integral knowledge and professional skills required to be successful in healthcare careers. It prepares students for the rigor of healthcare career programs. It emphasizes understanding of the professional culture, deep learning of key foundational skills, application of health information technology, and demonstration of cultural competence in interactions with others. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 eligibility, or consent of Department Chairperson. Completion of the H2P orientation Program. Current and valid CPR certification. Concurrent enrollment in the Health Professions 101 course or current and valid certification as an entry level clinical. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

## S LECTURE HOURS. 3 CR



## HEALTH SCIENCE

#### **HEALTH SCIENCE 101**

#### **Trends and Issues in Health Care Delivery**

Introduction to healthcare delivery systems. Various health professions will be presented with emphasis on their primary role and how they interact or complement each other in delivery of healthcare services. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HEALTH SCIENCE 102**

## **Professional Medical and Health Care Practices**

This course includes the study of ARConyms and current professional jargon used in the medical and healthcare environment. Emphasis includes examination of data used in the delivery of healthcare and the characteristics of the healthcare workforce. Chronic illness and rehabilitative care will be examined as well as primary and specialty care in light of managed care. The process of accrediting and licensure of health science programs will be explored. A case study format involving inter-disciplinary health science programs will be reviewed, emphasizing systematic clinical applications. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **334 HEALTH TECHNOLOGY**

#### HEALTH TECHNOLOGY 107 Health and the Public

Students will examine both historical and contemporary public health stories focusing on the United States to begin to understand the contexts, systems, professionals, tools and skills associated with the public health enterprise. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101. 150 MINUTES, 3 CREDIT HOURS,



#### HEALTH TECHNOLOGY 110 Public Health and Global Societies

The course introduces students to the main concepts of the public health field and the critical links between global health and social and economic development. Students are presented with an overview of the determinants of health and how health status is measured. Students also review the burden of disease, risk factors, and key measures to address the burden of disease in cost-effective ways. The course covers key concepts and frameworks, but is very practical in orientation. The course is global in coverage but with a focus on low-and-middle income countries and on the health of the poor. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101.

150 MINUTES. 3 CREDIT HOURS.



#### **HEALTH TECHNOLOGY 120**

#### Public Health and the Study of Disease and Epidemics

This course is designed to introduce the basic principles surrounding the distribution of disease and epidemics in human populations. Through the use of lectures and field exercises, students will learn the fundamentals of epidemiology, and the basic science of public health. From historical perspectives to current day context, how disease differentially impacts populations will be the focus. Topics covered include surveillance of disease, the distribution of health outcomes (with particular emphasis on health inequities), outbreak investigation, the impact of the media on health outcomes, measurement of health outcomes, study design, and the impact of epidemiologic students on policy development and implementation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101. 150 MINUTES, 3 CREDIT HOURS,

## MX

#### **HEALTH TECHNOLOGY 701**

#### Introduction to Community Health Work

This course provides an overview of the healthcare system and community health work. Students will gain an understanding of the role of community health workers, the scope of their function and the types of services they may provide, and how they interact with other health personnel and resources. It includes principles of effective verbal and non-verbal communication to assist students in encouraging positive interaction. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **HEALTH TECHNOLOGY 702**

#### **Accessing Community Resources**

This course will provide students with a brief overview of public health, its services and core functions in the protection and promotion of health and prevention of disease and injury. It will include selected international, national and local health organizations that influence public health. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **HEALTH TECHNOLOGY 703**

#### **Community Health Problems**

This course will focus on developing community leadership and capabilities to identify and address community health needs. This course is designed to help students develop self, client and community capacities to protect and improve health. Emphasis is on building individual and other community participation in health through information sharing, informal counseling, counseling, social support, instruction, community-wide assessments and promoting changes in negative behavior. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### HEALTH TECHNOLOGY 704 Communicable Disease

This course will provide students with an overview of communicable disease. It will provide students with information on prevention, referral sources and treatment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **HEALTH TECHNOLOGY 705**

#### **Nutrition, Exercise and Disease**

This course will provide students with the information necessary to promote healthy eating style and proper food preparation for all age groups. This course gives students information about identifying the relationship of diet to disease. Attention is given to the treatment of disease by diet modification. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### HEALTH TECHNOLOGY 706 Human Development Overview

This course provides students with information on pre-conceptual, intraconceptual, prenatal care, fetal development and newborn care. Students will gain an understanding of the various stages of human development and recognize their role in promoting acceptable standards of healthcare. This course includes information of the important role parents have in the development of children. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Introduction to Community Health Work (334 0701). 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### HEALTH TECHNOLOGY 707 Portfolio Development

This course will provide students an opportunity to carefully select and organize their professionally related academic accomplishments. It provides documentation of students having met the entry-level competency skill standard for community health workers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### HEALTH TECHNOLOGY 708 Adult and Senior Health

This course will focus on adult health throughout the early, middle and later stages of adult development and health issues. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **HEALTH TECHNOLOGY 709**

#### Substance Abuse Issues

This course gives students an overview of what substance abuse is and how to recognize it. Students will become familiar with misuse and abuse of substances ranging from over the counter medications to highly controlled narcotics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **HEALTH TECHNOLOGY 710**

#### Mental Health Issues

This course will provide an overview of mental health issues and concerns of community and families. This course also covers the more prevalent disease such as depression, domestic violence, developmental delays, alcoholism, etc. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## HEALTH TECHNOLOGY 711

## **Case Management Fundamentals**

This course is designed to provide students with the basic case management skills. The focus of this course is on the main components of case management, outreach, screening, intake, referrals, and follow-up. Students will learn about home visits, universal precautions and handling emergencies on the job and in the community. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 and Computer Information Systems 120 and Introduction to Community Health Work (334 0701).

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### HEALTH TECHNOLOGY 712 Field Experience: First Aid and CPR

This course is an introduction to working in the healthcare field. This course will include field experience and basic skills for working effectively in communities providing patient advocacy, professional communication skills, and approaches in working effectively with co-workers and agencies, and awareness of basic research and interviewing skills. It will provide basic skills in performing CPR and First Aid. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 10 LAB HOURS. 6 CREDIT HOURS.



#### HEALTH TECHNOLOGY 987 Introduction to Health Science

This course includes an overview of therapeutic, diagnostic, informational, environmental service, and biotechnical clusters of a health science career path. The course focuses on health careers exploration, healthcare systems roles, and leadership, employability, and communication skills. Students will develop a concept of health maintenance practices, safety, teamwork, and legal/ethical responsibilities. School-to-work shadowing experiences will be implemented in this course. Subject matter will include career choices and application of health concepts relative to becoming a healthcare professional. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### HEALTH TECHNOLOGY 988 Communications for Nurses

This course provides improvement of reading skills through use of SPA materials: improvement of grammar skills through teacher prepared materials and writing experience including a library reference report; improvement of study skills including outlining, note taking and listening skills; introduction to medical terminology including prefixes and suffixes and accurate spelling in preparation for hospital charting. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### HEALTH TECHNOLOGY 991 Refresher Course for LPN's

4 LECTURE HOURS AND 6 LAB HOURS. 6 CREDIT HOURS.

КК

## **434 HEALTH TECHNOLOGY**

#### HEALTH TECHNOLOGY 102 Home Health Aide

This course is designed to enable the Certified Nurse Assistant to learn and understand the basic concepts, attitudes, behaviors, and procedures required to enable him/her to provide good, safe, and comprehensive care to clients of all ages and physical conditions, in the home under the supervision of a registered nurse. This course will incorporate a Human Potential module which includes, through direct experience, students examining their own values, attitudes, strengths and beliefs. Emphasis is on the application of these characteristics in conflict resolution and life style planning in the home healthcare setting as well as their own situation. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### HEALTH TECHNOLOGY 103 Nurse Assistant

This course will prepare students to become certified as a "nurse assistant" in the State of Illinois. Clinical training is required for all students enrolled in this program. Upon successful completion of the program, students will be eligible to take the State-mandated written competency examination for Nurse Assistant Certification. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 15 LAB HOURS. 7 CREDIT HOURS.



## HEALTH TECHNOLOGY TC6 104

**Occupational Rehabilitation Aide** 

This course will prepare students to become an Occupational Rehabilitation Aide registered with the Illinois State Department of Public Aid. Student enrolling in this program will acquire skills necessary to carry out Activities of Daily Living (ADL) tasks. Clinical training is required for all students enrolled in this program. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



## **HEALTH TECHNOLOGY TC6 200**

#### **Medical Terminology**

This course will incorporate the study of terms related to medical science, hospital services, medical specialties including pathology and radiology and abbreviations used in medicine. Instruction will also include spelling and pronunciation of various medical terms. Writing assignments, as appropriate to the discipline, are part of the course.

**5 LECTURE HOURS. 5 CREDIT HOURS.** 



## HEALTH TECHNOLOGY 201

#### **Medical Office Insurance Procedures**

This course introduces students to the basic insurance billing and accounting concepts utilized in the medical practice field. Students enrolled in this class will become acquainted with skills and knowledge on inputting patient information, scheduling appointments, handling bills, ICD-9 and CPT coding and producing lists and reports necessary for the medical office. MediSoft patient accounting software will be utilized to acquaint students with the various patient accounting and insurance billing tasks used today. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Business Com and Tech 303.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



## **HEALTH TECHNOLOGY 202**

#### **Medical Office Simulation**

This course will give students an opportunity to become more proficient in the use of MediSoft patient accounting software features. This class is a continuation of Medical Office Insurance Procedures which incorporates computer lab practice time as well as fifteen hours of extended campus internship activities in a medical office. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): 434 Health 201.

3 LAB HOURS. 1 CREDIT HOUR.



## **HEALTH TECHNOLOGY 300**

#### Medical Office Externship

The Medical Office Technology Externship is designed to give students exposure to the medical environment; allowing students use the medical terminology, computer, and office skills that they acquired in the classroom setting. Writing assignments, as appropriate to the discipline, are part of the course.

5 LAB HOURS. 1 CREDIT HOUR.



## HEALTH INFORMATION MANAGEMENT

#### HEALTH INFORMATION MANAGEMENT 101 Introduction to HIT

This course is designed to provide a working knowledge of healthcare delivery systems; the health information profession; the definition and the purpose of the medical record; the systems and processes for collecting, maintaining and disseminating health information; numbering, retention, and storage of medical information; forms control and design; indexes and registers; release of patient information, security, privacy, confidentiality, and ethical issues; documentation requirements; regulatory requirement of healthcare organization, accrediting and licensing agencies, and computerized information management systems utilized by health information management departments. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### HEALTH INFORMATION MANAGEMENT 102 Medical Billing

This course is designed to provide an introduction to medical billing. Topics covered will include medical billing procedures, billing procedures in different healthcare settings, and types of healthcare insurance. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.

MX

#### HEALTH INFORMATION MANAGEMENT 103 Basic Coding ICD9/ICD10

An introduction to the basic coding guidelines of the International Classification of Diseases (ICD) nomenclature. Topics include the format of ICD-9/10, practice code assignment, ethical coding principles, encoding systems, and software with practice applications. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

MX

#### HEALTH INFORMATION MANAGEMENT 104 Basic Coding CPT-4

An introduction to the basic coding guidelines of the Current Procedural Terminology (CPT) nomenclature. Topics include the format of CPT and practice code assignment, ethical coding principles, encoding systems and software with practice applications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health Information Management 103, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

MX

#### HEALTH INFORMATION MANAGEMENT 201 Clinical Pathophysiology

This course introduces the nature of disease and its effects on the body systems. The most common diseases and disorders of each body system are presented along with a review of the anatomy and physiology related to the content. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 116, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## HEALTH INFORMATION MANAGEMENT 202 Advanced Coding ICD9/10 and CPT-4

This course provides advanced coding techniques for the CPT-4, ICD-9-CM, and ICD-10M/PCS coding systems with emphasis on official coding guidelines, and sequencing. Emphasis on case studies, health records, and federal regulations regarding perspective payment systems and methods of reimbursement. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health Information Management 103 and Health Information Management 104, or consent of Department Chairperson.



#### **HEALTH INFORMATION MANAGEMENT 203**

#### **Reimbursement Methodologies**

This course introduces terminology, rationale and methodology used by thirdparty payers to determine the reimbursement for healthcare providers. Proper completion of the 1500 billing form and legal issues related to reimbursement will be discussed, as well as the role health information management plays in the charge master maintenance, reimbursement monitoring, and revenue cycle. An overview of hospital and nursing home billing systems including proper submission of UB-92 billing forms will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### HEALTH INFORMATION MANAGEMENT 204 Health Care Statistics

This course introduces healthcare statistics in relation to management, decisionmaking, government agencies, quality assessment and research. Students are introduced to research techniques and reporting protocol for hospital statistics. Cancer and other specialized registries will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health Information Management 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

## MX

## **HEALTH INFORMATION MANAGEMENT 205**

#### Health Information Management Seminar I

This course is a capstone course that emphasizes the integration of the knowledge, skills, and abilities developed as a part of the health information management advanced certificate curriculum. This course specifically focuses on students' ability to demonstrate a comprehensive, integrated response to simulated scenarios students will face in the work environment. Students will also develop their resume and portfolio in preparation for entry into the workforce. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Students must be in their last semester of the Advanced Certificate Program and Consent of Department Chairperson.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### **HEALTH INFORMATION MANAGEMENT 206**

#### Health Information Management Seminar II

This course is a capstone course that emphasizes the integration of the knowledge, skills, and abilities developed as a part of the health information management Associate Degree curriculum. This course specifically focuses on students' ability to demonstrate a comprehensive, integrated response to simulated scenarios students will face in the work environment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Students must be in their last semester of the Associate Degree Program and Consent of Department Chairperson.

#### **1 LECTURE HOUR. 1 CREDIT HOUR.**



#### HEALTH INFORMATION MANAGEMENT 207 Health Information Management Practicum

This course is a practicum course that provides practical experience for students enrolled in the Associates Degree in Health Information Management program. This practicum is focused on the application and synthesis of knowledge, skills, and abilities developed as a part of the health information management associate degree curriculum to a healthcare setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Concurrent enrollment in Health Information Management 206. Students must be in their last semester of the Associate Degree Program and Consent of Department Chairperson.

1 LECTURE HOUR. 1 CREDIT HOUR.

MX

## HISTORY

## HISTORY 216

#### History of Latin America in the U.S.

History, development, and contributions of persons of Latin American origin or ancestry in the United States with emphasis on those of Mexican, Puerto Rican and Cuban background; includes pre-colonial origins in America, Europe and Africa; development of distinct cultures in the Western Hemisphere; migration patterns to the United States; development of communities in the United States and directions in the Chicago area. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## HORTICULTURE

## **HORTICULTURE 101**

#### Introduction to Ornamental Horticulture

Plant structures, terminology and use of identification keys; study of culture and use of annuals, biennials, herbaceous perennials. Writing assignments, as appropriate to the discipline, are part of the course.

#### 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### HORTICULTURE 102

#### **Turfgrass Management**

Lawn grasses and ground covers and insects, diseases and pests common to them; lawn planning, constructions, renovation, weed control and fertilizing. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### HORTICULTURE 103 Landscape Pest Management

Diagnosis of plant diseases and disorders, physiological and pathological, and application of control measures for insects, diseases and pests of ornamental plants; survey of diagnostic and identification keys. Writing assignments, as appropriate to the discipline, are part of the course.



## **HORTICULTURE 104**

#### **Plant Propagation**

Techniques used in reproducing plants, both from seed and vegetative parts; propagating units, factors affecting rooting, growth substances, rooting media and seed treatment; principles of heredity, structure of genetic material and mechanics of transmission, and importance of genetics in hybridization. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



## **HORTICULTURE 105**

#### Identification of Herbaceous Landscape Plants

This course focuses on identification of herbaceous plants used in the landscape. Study the ornamental value, use and culture of annuals, biennials, and perennials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Horticulture Program/Plan 241.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### HORTICULTURE 106

#### Identification of Woody Landscape Plants I

This course focuses on the identification, ornamental value and culture of wood landscape plants. Emphasis on deciduous trees and coniferous evergreen trees and shrubs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Horticulture Program/Plan 241.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## HORTICULTURE 107

#### Soils and Fertilizers

Study of soils, the formation of soils, physical and biological properties of soil, the relationship of water in soils. Units to include soil fertility, fertilizers and fertilizers applications, damage to soil, and soiless media. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Horticulture Program/Plan 241.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



### HORTICULTURE 201

#### **Supervised Horticulture Experience**

This course focuses on placing students with a horticulture company during seasonal semesters. A focus on practical experiences as performed in the horticulture industry. Regular supervisory visits by the instructor.

Prerequisite(s): Admission to the Horticulture Program/Plan 241.

**5 LECTURE HOURS. 5 CREDIT HOURS.** 



#### **HORTICULTURE 202**

#### Landscape Design I

Aesthetic and economic importance of grounds improvement, residential and commercial; site analysis, requirements of landscape plans, scale drawings, and landscape symbols; nursery classification, selection of plant materials, and landscape construction. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### HORTICULTURE 203 Landscape Design II

Continuation of Horticulture 202, with emphasis on commercial landscaping; blueprint reading planning and construction of decorative gardens, athletic fields, and public parks. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.

HW

## **HORTICULTURE 204**

#### Landscape Installation

This course focuses on landscape construction including site preparation; drainage, irrigation, and lighting systems; installing edging, walls, fences, paving decks, water features, and plantings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Horticulture Program/Plan 241.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **HORTICULTURE 205-1**

#### Arboriculture

Continuation of plants identification, covering use and culture of deciduous and evergreen trees and shrubs. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.

HV

#### **HORTICULTURE 206**

#### Identification of Woody Land Plants II

This course focuses on a continuation of woody landscape plant identification with emphasis on deciduous shrubs, broadleaf evergreens, vines and ground covers. Ornamental value and plant culture are also covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Horticulture Program/Plan 241.

#### 3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## HOSPITALITY

## HOSPITALITY 102

Hotel-Motel Sales Promotion

Organization and function of sales department. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Hospitality 104, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **HOSPITALITY 103**

## Food and Beverage Supervision

Overview of the food and beverage field as part of hospitality industry and the departments that make up food and beverage operation in a hotel. Preparation and service of food and alcoholic beverage are included. The course is taught at a Chicago hotel. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Hospitality 104, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



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# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### **HOSPITALITY 104**

#### Introduction to Hospitality Industries

History and organization of the hospitality industry, hotel-motel, food service, traveltourism, with emphasis on career opportunities and jobs, economic projections and industry trends, and on the meaning of hospitality in each industry. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **HOSPITALITY 108**

#### Introduction to Meeting, Convention Management and Planning

The study of the meeting and convention Industry; the role and responsibilities of planners employed by associations, businesses and other segments of the industry. The course will also include the study of key concepts of meeting and convention planning such as: specific goal setting; research and selection of locations; facilities; transportation; support services; and development of marketing, promotion and publicity programs to achieve goals. Writing assignments, as appropriate to the discipline, the course.

Prerequisite(s): Hospitality 104, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **HOSPITALITY 202**

## Front Office and Room Division Management

Overview of the front office operation within the context of the hotel industry including the understanding of the special problems of room division management. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Hospitality 104, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **HOSPITALITY 205**

## **Hospital Industry Purchasing**

Study of organization and administration of quantity purchasing policies and procedures; specifications, inventory buying, receiving and issuing of items used in hospitality operations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HOSPITALITY 209**

#### **Applied Meeting and Convention Management**

Employs material covered in previous Meeting and Convention Management courses and provides in-depth study of insurance, liabilities, legal aspects, managing exhibits, on-site management of catered events, and emergency and contingency plans. Using a case study format, each student will design and execute a convention/meeting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## HOSPITALITY MANAGEMENT

#### HOSPITALITY MANAGEMENT 803 Customer Service Fundamentals

This class has a defined focus on how to provide the service that is expected when a person is a guest at a hotel, restaurant, banquet hall, casino or other venue. It covers interactions with guests, responses to difficult situations, service recovery and how to develop better interpersonal skills that will lead to outstanding customer service. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. 3 LECTURE HOURS. 3 CREDIT HOURS.

LECTURE HOURS. 3 CREDIT

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## **HOSPITALITY MANAGEMENT 805**

#### **Hospitality Financial Management**

Essential managerial accounting functions utilized in the hospitality industry. This class is meant to be a foundation for managers in the hospitality industry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



(кк)

#### HOSPITALITY MANAGEMENT 808 Restaurant Operations

Fundamentals of basic restaurant management are covered in the course where students are exposed to the entry level front-of-house positions that create the core of operations to the management of those employees and beyond including customer service and financial management. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98.

3 LECTURE HOURS. 4 CREDIT HOURS.

## HOSPITALITY MANAGEMENT 810 Bar and Beverage Operations

Foundations of creating and maintaining a bar business including equipment, liquor, wine, beer, wine and food pairing, sanitation, employee management, purchasing, receiving and storage, and planning for profit. It emphasizes the importance of revenue generation through alcohol sales in a restaurant while placing a focal point on responsible alcohol service. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Grade of C or better in Hospitality Management 803, Hospitality Management 805, Hospitality Management 808 and Culinary 700, Culinary 701, Culinary 703, Culinary 705, Culinary 708, Culinary 723 or consent of Department Director or Dean.



## **HOSPITALITY MANAGEMENT 812**

### **Hotel and Lodging Operations**

Fundamentals of basic hotel and lodging management are covered in this class where students will learn the duties and responsibilities associated with hotel operations. Departments explored include front desk, housekeeping, sales and marketing, engineering, food and beverage and accounting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Grade of C or better in Hospitality Management 803, Hospitality Management 805, Hospitality Management 808 and Culinary 700, Culinary 701, Culinary 703, Culinary 705, Culinary 708, Culinary 723 or consent of Department Director or Dean.

**3 LECTURE HOURS. 4 CREDIT HOURS.** 



#### **HOSPITALITY MANAGEMENT 814**

#### Hospitality Procurement

Comprehensive look at acquisition of goods and services starting from the buyer determining what is needed to the actual receiving of the goods purchased. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Grade of C or better in Hospitality Management 803, Hospitality Management 805, Hospitality Management 808 and Culinary 700, Culinary 701, Culinary 703, Culinary 705, Culinary 708, Culinary 723 or consent of Department Director or Dean.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HOSPITALITY MANAGEMENT 816**

#### Introduction to Hospitality Marketing Principles

Fundamentals and foundations of hospitality marketing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Grade of C or better in Hospitality Management 803, Hospitality Management 805, Hospitality Management 808 and Culinary 700, Culinary 701, Culinary 703, Culinary 705, Culinary 708, Culinary 723 or consent of Department Director or Dean.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **HOSPITALITY MANAGEMENT 830**

#### **Catering and Events Management**

Catering operations are an integral part of many restaurants and hotels. Students will learn aspects of effective planning which in turn leads to successful execution of events and will be exposed to menu design, room selection, cost control, pricing and contracts, and managing an event. Sales and marketing, financials, food and beverage service, and staffing will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Grade of C or better in Hospitality Management 803, Hospitality Management 805, Hospitality Management 808 and Culinary 700, Culinary 701, Culinary 703, Culinary 705, Culinary 708, Culinary 723 or consent of Department Director or Dean.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



## HOSPITALITY MANAGEMENT 835

#### **Casino Operations**

As an introduction to casino organizations and culture, this class will explore the history, systems and technology and marketing crucial to casino and gaming operations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Grade of C or better in Hospitality Management 803, Hospitality Management 805, Hospitality Management 808 and Culinary 700, Culinary 701, Culinary 703, Culinary 705, Culinary 708, Culinary 723 or consent of Department Director or Dean.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### HOSPITALITY MANAGEMENT 860 Hospitality and Culinary Internship

This Cooperative Education courses is designed to provide employment skills as a concurrent and integral part of a student's educational program in hospitality and culinary. Students are placed in an approved employment situation mutually agreed upon by students, college staff, and employer, with the opportunity of applying knowledge and being exposed to work methods unavailable in the classroom.

Prerequisite(s): Eligibility for English 100 and Reading 125 and Mathematics 98. Successful competition with a C grade or better in Culinary 705, Culinary 706 in Culinary Arts Program or Baking and Pastry 767, Baking and Pastry 768, Baking and Pastry 769, Baking and Pastry 770, Baking and Pastry 771 in Baking and Pastry Program or Hospitality Management 803, 705, 808, 712, Culinary 723 in Hospitality Management Program.

4 CREDIT HOURS.



## HUMAN DEVELOPMENT AND FAMILY STUDIES

#### HUMAN DEVELOPMENT AND FAMILY STUDIES 201 Human Development and Sexuality

A study of the social and psychological aspects of human sexuality. Topics include sexual development, cultural influences, gender identity, sexual dysfunctions, love and relationships. Emphasis will be placed on the mental and emotional aspects of human sexuality as well as current issues. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### HUMAN DEVELOPMENT AND FAMILY STUDIES 202 Intimate Relationships

An overview of theories and research related to intimate/romantic relationships as well as family members, friends, and professional. Students will be encouraged to think critically about the various components of healthy relationships including comparative research within self-expectations and effects of such as perpetuated by the media and other sources. Topics include communication, conflict, love, stress, strains, and overall impact on relationships. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 and Child Development 102. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



## HUMAN DEVELOPMENT AND FAMILY STUDIES 203

## Family Development/Cross Cultural Perspective

Course includes information on families and culture through an examination of research on child development, child rearing across cultures, and issues of equity, power and privilege. Readings and discussion on how culture and context influence all aspects of development whereby students gain in-depth understanding of families and lifestyles, communication and conflict, domestic violence, dysfunctions within families, and inter-generational families. Course also provides a knowledge base for family assessment, understanding one's own family, tools to prepare one to work with families in a variety of settings and across the lifespan. Topics such as child rearing, language differences, racial identity, cultural traditions, and socio-economics status will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### HUMAN DEVELOPMENT AND FAMILY STUDIES 204 Family Life Education

Introduction to and history of the professional and practice of family life education, including needs assessment, evaluation of programs, understanding group process, and contexts of family life education. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### HUMAN DEVELOPMENT AND FAMILY STUDIES 205 Internship for Human Development

Participation in occupational area of study, and work experience under supervision of both college and employer. Internship objectives developed by student and faculty advisor, with approval of employer, to provide appropriate work-based learning experience at the site 15 hours per week. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Completed and accepted application, Grade of C or better in Child Development 101 and 102, all courses in Human Development and Family Studies program including any special certificates.

#### 2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



#### **HUMANITIES**

#### HUMANITIES 100

#### **Critical Readings in Humanities**

For students with little or no prior exposure to humanistic studies; an opportunity to improve and gain confidence in reading and writing skills in subject areas where creativity and imagination play a much greater part than they do in most basic skills courses. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **HUMANITIES 216**

## Athletics in the Ancient World

A survey of ancient events that emphasizes the role of sports in ancient societies. The course focuses on various aspects of athletics and provides a comparative examination of ancient and modern sports activities and athletic values. Some topics will include: sportsmanship in the ancient world, rules of the games, training and competing, women in ancient athletics, religion in ancient athletics, and athletics in ancient myth. Students will examine and discuss many types of ancient evidence, including readings in translation from several ancient literary texts, paintings, sculpture, and archeological remains. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or English 100 with a C or better or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## IBEW

## **IBEW 702**

#### **Electrical Circuitry**

This course will include a study in circuitry used in the residential housing industry in the Chicago metropolitan area. Installation practices. Practical hands-on wiring skills such as splicing and termination will be taught. The students are expected to apply themselves, learn and accomplish entry levels of proficiency in these subject areas. Writing assignments, as appropriate to the discipline, are part of the course. **3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.** 

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## **IBEW 703**

## **Conduit Bending I**

This course is designed to teach students the various methods of bending conduit employed in the electrical construction industry. The focus of the course is on hand-type benders and methods of conduit installation utilized in the commercial, industrial and residential housing industry. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 4.5 LAB HOURS. 3.5 CREDIT HOURS.



## **IBEW 704**

## Construction Technology

This course will include a study of common hardware and wiring materials used in the electrical construction industry. This course will include first aid, personal safety, and job site safety; the use of rope, knot tying, and basic rigging; drill gauges, drilling and tapping holes in metal, and drill sharpening; using knockout sets, hole saws, concrete anchors and fastening devices; and the use and care of hand tools, drill motors, hammer drills and grinding wheels. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



#### IBEW 705 Print Reading I

Upon completion of this course, students will have gained a thorough knowledge of residential prints and their use with the National Electrical Code. Writing assignments, as appropriate to the discipline, are part of the course.



## **IBEW 706**

## **Conduit Bending II**

Upon completion of this course, students will have gained skills in advanced conduit bending techniques utilizing mechanical leverage benders and hydraulic benders commonly used in the electrical construction industry. Hand-operated and automatic cutting and threading devices will also be mastered. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.



#### **IBEW 707**

#### **Fire Alarm Systems**

Upon completion of this course, students will have mastered the basic concepts and theory of installation and maintenance of fire alarms systems and fire suppression systems currently in use in the electrical construction industry. Testing, troubleshooting and safety techniques through hands-on training and field simulated problems are developed. The course will also discuss the Chicago and National Electrical Codes as they pertain to the installation and maintenance of fire alarm systems. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.



#### **IBEW 708**

#### **Motor Control Systems**

Upon completion of this course, students will have mastered the basic concepts and theory of installation, operation, and maintenance of motor control devices commonly used in the electrical construction industry. Skills in testing, troubleshooting, and safety techniques will be developed through hands-on training and the use of field simulated problems. In addition, this course includes a discussion of the theory and the practical application of transformers as used in the electrical industry. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.



## **IBEW 709**

#### **Print Reading II**

Upon completion of this course, students will have gained thorough knowledge of commercial and industrial construction prints, and their use with both the Chicago Electrical Code and National Electrical Code. Writing assignment, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **IBEW 710**

#### **Programmable Control**

Upon completion of this course, students will have mastered the basic concepts and theory of installation, operation, and maintenance of programmable control systems commonly used in the electrical industry. Programming techniques and hands-on training will be provided in the lab on Allen-Bradley systems PL5/20, PLC5/11, and SLC 5/03 CPU programmable controllers. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



## **IBEW 711**

#### Communications

The BICSI Installer level telecommunications cabling installation training is designed for individuals with two to five years of low voltage cabling experience. The class combines lecture with hands-on skills practice using tools and equipment provided in class. The following areas are covered: ANSI/TIA/EIA wiring Standards and the National Electrical Code. LAN cabling system characteristics and network topologies, media and media characteristics, transmission fundamentals, connectorization, grounding and bonding, pulling and terminating copper and fiber, testing and troubleshooting copper and fiber, splicing fiber, fire stopping site surveys and safety practices. There will be a final examination and a period of structured on-the-job training to be completed at students' workplace. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 4.5 LAB HOURS. 4 CREDIT HOURS.



## **IBEW 712**

#### **HVAC Systems**

Upon completion of this course, students will have mastered the theory of thermal dynamics and the processes used in the heating, ventilation and air-conditioning systems. Hands-on training is an integral part of the course. The course will cover skills in piping, brazing, soldering, and the EPA standards for charging, and evacuating air-conditioning and refrigeration systems. This course meets the Refrigeration Service Engineers Society Technician Certification Standard. The midterm examination shall be the RSES Technician Certification test. It will be mandatory to pass the RSES Technician Certification test before becoming a journeyman. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.

DA

## **IBEW 713**

#### Instrumentation

Upon completion of this course, students will have mastered the basic concepts and theory of installation, operation, and maintenance of instrumentation control process commonly used in the electrical construction industry. The student will master the theory of flow, pressure, temperature, and level. Calibration techniques are taught through hands-on training, bench testing, and lab work with a variety of instruments, the Fluke 702 Calibrator and the Rosemount Communicator. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



## IBEW 714

## **Technical Mathematics I**

Upon completion of this course, students will have mastered the calculations and applications of the formulas used daily in the first year apprentice course of study, and in the electrical construction industry. Writing assignment, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **IBEW 715**

#### **Technical Mathematics II**

Upon completion of this course, students will have mastered code calculations and problem-solving techniques used in the application of Ohm's Law in accordance with the National Electrical Code. Writing assignment, as appropriate to the discipline, are part of the course.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### IBEW 716 Electronics

Electronics

This course covers basic electronic and its application to the communications industry. The course will cover basic electric theory, direct current, alternating current, Writing Ohm's Law, the use and calibration of electrical test equipment, electrical safety, soldering skill, series, parallel and combination circuits, and electronic components. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



## **IBEW 717**

#### **Structured Wiring**

This course provides students with a thorough knowledge of the wiring materials commonly used in the communications industry. This course provides instruction on personal safety, jobsite safety and shop safety as it applies to the communications industry. In addition, there will be instruction in applicable EIA/TIA standards, BICSI requirements, media characteristics, transmission characteristics, fire protection, documentation, grounding, bonding, electrical protection, and other relevant industry practices. Upon satisfactory completion of the course, students will be eligible for the BICSI Level I Installer Examination. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



## IBEW 718

#### **Integrated Systems I**

This course will introduce students to the basic concepts and theory of digital and analog based audio communications systems. This course will cover skills in installation, balancing, testing and troubleshooting of audio communications equipment. Included are constant voltage audio systems, paging systems, background music system, and sound reinforcement systems. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.



#### **IBEW 719**

#### **Integrated Systems II**

This course will cover the basic concepts and theory of transmission and distribution of digital and analog based video signals. This course will cover transmission line theory and signal propagation along with installation, testing and troubleshooting of video communications equipment. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



#### **IBEW 720**

## **Communication Systems Verification**

This course covers the testing, benchmarking and troubleshooting of fiber optic and copper based communications systems. Also covered are the proper use of field test equipment, electrical safety, transmission characteristics, fault location, and analysis of field test results. Writing assignments, as appropriate to the discipline, are part of this of course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.

#### IBEW 721 Fiber Optics

This course covers the basic concepts and theory of digital transmission of communications over fiber optic communications cabling. This course will cover skills in installation, testing and troubleshooting of fiber optic connectors and cabling systems. This course meets the Fiber Optic Association Certification standards for Fiber Optic Association Certification standards for fiber optic installation. Writing assignments, as appropriate to the discipline, are part of this course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.



## **IBEW 722**

## **Computer Networking**

This course provides students with an overview of the basics of networking from the component hardware to the topology and theoretical foundation of networks. Various types of networks and network topologies will be covered. Writing assignments as appropriate to the discipline, are part of this course.

3.5 LECTURE HOURS AND 3 LAB HOURS. 4.5 CREDIT HOURS.



## **IBEW 723**

## Industrial Control Systems

Upon completion of this course, students will be proficient in the field of industrial control and planning. Industrial control training will focus on modern systems incorporating feedback loops, analog and pneumatic signals, and the smart family of transmitters. The dominant process variables – temperature, pressure, level, and flow – will be employed in the development of these skills. The planning section of this course will cover electrical layout with an emphasis on initial conduit installation, reading blueprints of various building trades, calculating loads based on the electrical code, designing distribution systems, and sizing and protecting electrical conductors. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 2 LAB HOURS. 4.5 CREDIT HOURS.



#### IBEW 724 Electrical Power Systems

Upon completion of this course, students will have mastered the theory of distribution and usage of electricity in common industrial settings. Hands-on training is an integral part of the course. The student will learn the basics of power distribution with an emphasis on transformers and the four basic power systems: delta, corner grounded delta, high leg delta, and wye. The student will learn about the largest user of this distributed power: rotating equipment-motors. The motors portion of the course covers single phase and three phase motors. The single phase motors include shaded pole, AC series, permanent split capacitor and motors with starting relays. The three phase motors include wye, delta and wye/delta motors. Finally, students will learn the newest technique for motor control, variable speed drives. The course will cover the theory of pulse width modulation and the safe operation of frequency drive motors. The student will learn about line lengths, over voltage, overheating, harmonics, and drive components. Writing assignments, as appropriate to the discipline, are part of the course.

3.5 LECTURE HOURS AND 2 LAB HOURS. 4.5 CREDIT HOURS.



#### **IBEW 725**

## Low Voltage Systems

Upon completion of this course, students will have mastered the basic concepts and theory of the installation and maintenance of low voltage systems currently in use in the electrical construction industry. Installation, testing, troubleshooting and safety techniques through hands-on training and field simulated problems are developed. This course will cover topics in security, life safety, access, environmental controls, communications, data transfer, and data storage. The associated electrical codes are included in daily discussions as they pertain to installation and maintenance of low voltage systems. Writing assignments, as appropriate to the discipline, are part of the course.

2.5 LECTURE HOURS AND 3 LAB HOURS. 3.5 CREDIT HOURS.



#### **INSPECTOR PROGRAMS**

## **INSPECTOR PROGRAMS 614**

## **Field Inspector Fundamentals I**

This course will explore the practices and procedures utilized in the construction and building inspection industry. Also included will be an introduction to basic plan reading and examination of professional ethics in construction and building inspection and unionism. Writing assignments, as appropriate to the discipline, are part of the course.

## 1 LECTURE HOUR. 1 CREDIT HOUR.



#### **INSPECTOR PROGRAMS 615**

#### Introduction to Nuclear Gauge Density

Prepares students to operate a nuclear density gauge on asphalt quality control/ quality assurance (QC/QA) projects. This course covers the use of the Nuclear Density gauge and paperwork involved. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### INSPECTOR PROGRAMS 616 Hot Mix Asphalt I

This course is designed to provide students with general information on Illinois Department of Transportation Quality Control/Quality Assurance (QC/QA) program as it relates to Hot Mix Asphalt (HMA). Persons completing this course will be able to do the field testing for PCC on QC/QA projects and will also receive certification from ACI as a Field Testing Technician-Grade 1. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### INSPECTOR PROGRAMS 617 Portland Cement Concrete I

This course is designed to provide students with general information on Illinois Department of Transportation Quality Control/Quality Assurance (QC/QA) program as it relates to Portland Cement Concrete (PCC). Persons completing this course will be able to do the field testing for PCC on QC/QA projects and will also receive certification from ACI as a Field Testing Technician-Grade 1. Writing assignments, as appropriate to the discipline, are part of the course."

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **INSPECTOR PROGRAMS 618** Plan Reading and Basic Design

This course is designed to teach students specific knowledge of print reading, along with proper sketching technique for report writing utilized by construction, and building field inspectors. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

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## **INSPECTOR PROGRAMS 619**

#### Field Inspector Fundamentals II

A continuation of Field Inspector Fundamentals II. This course further exams the professional ethics and legal responsibilities of field inspectors. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 614.

1 LECTURE HOUR. 1 CREDIT HOUR.

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#### INSPECTOR PROGRAMS 620 Soil Types and ASTM Standards I

This course is designed to familiarize students with types of soils, geological history and American Society Testing and Materials Standards. Vocabulary and geographical knowledge will also be a part of the course. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

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## **INSPECTOR PROGRAMS 621**

#### Soil Types and ASTM Standards II

This course is a continuation of Soil Types and ASTM Standards I. Students will become further familiarize with understanding of soil density, bearing capacity, soil stabilization and ASTM standards. Vocabulary and geographical knowledge will also be a part of the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 620.

3 LECTURE HOURS. 3 CREDIT HOURS.

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#### **INSPECTOR PROGRAMS 622** Introduction to Grade Stakes

This course is designed to familiarize students with reading and shooting grade stakes in the field. This course will also teach basic civil plan reading technique. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### INSPECTOR PROGRAMS 623 Portland Cement Concrete(PCC) II

A continuation to Portland Cement Concrete Level I. Persons completing this course will be able to do the batch plant inspections for PCC on QC/QA projects and will also quality to take to the American Concrete Institute (ACI) as a Field Testing Technician-Grade II. Writing assignments, as appropriate to the discipline, are part of the course

Prerequisite(s): Grade of C or better in Inspector Programs 613 and Inspector Programs 617. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



**INSPECTOR PROGRAMS 624** 

#### Soil Training II

This course will acquaint students with terminology used in the industry and general information on how to conduct routine tasks under general daily supervision, in the field of soils. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



## **INSPECTOR PROGRAMS 625**

#### Soil Training III

The course will provide student the basic knowledge needed to become an intermediate-level soil technicians. Students will learn how to work with standards, plans, specifications, and instructions in the field of soils. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 624.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **INSPECTOR PROGRAMS 626**

#### Hot Mix Asphalt II

This course is a continuation of Hot Mix Asphalt Level I. Student will be provided with general information on the Illinois Department of Transportation (IDOT) quality control and quality assurance (QC/QA) program as it applies to asphalt. Persons completing this course will be able to do plant testing for asphalt on QC/QA projects and will also qualify to take the IDOT certification exam for Field and Plant Testing Technician-Grade II. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 616 and Inspector Programs 618. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

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## **INSPECTOR PROGRAMS 627**

## Hot Mix Asphalt III

This course is a continuation to Hot Mix Asphalt Level II. Students will be provided with information on Asphalt and the Illinois Department of Transportation (IDOT) quality control and quality assurance (QC/QA) program as it applies to asphalt. Students completing this course will be able to do plant and field testing for asphalt on QC/QA projects along with mix design and editing. Students will also qualify to take the industry certification exam for Hot Mix Asphalt Technician-Grade III. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 626.

2 LECTURE HOURS. 2 CREDIT HOURS.



## **INSPECTOR PROGRAMS 628**

#### Structural Welding Code

This class is designed to familiarize students with the AWS D1.1 codebook. The class will cover types of metal, filler metal, joints and inspections procedures for all types of weldments. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### INSPECTOR PROGRAMS 628-1 Structural Welding Code

This class is designed to familiarize students with the AWS D1.1 codebook. The class will cover types of metal, filler metal, joints and inspections procedures for all types of weldments. Writing assignments, as appropriate to the discipline, are part of the course.

2-3 LECTURE HOURS. 2-3 CREDIT HOURS.

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#### **INSPECTOR PROGRAMS 629**

#### **Underwriter Laboratories Charts and ICC Fireproofing**

This course covers Underwriter Laboratories' (UL) specifications and standards for the application and inspection of fireproofed structural members. The course will focus on reading and finding information in the listed UL charts. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.

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## **INSPECTOR PROGRAMS 630**

## Post Tension

The course is designed to acquaint students with general information on post tension concrete concepts and theory. Information provided on inspection procedures, how to properly install barrier cables, document findings, and how to troubleshoot and inspect repairs. Upon completion of this course, students will take the Post Tension Institute Level 1 and 2 certification exam. Writing assignments, as appropriate to the discipline, are part of the course.

1-2 LECTURE HOURS. 1-2 CREDIT HOURS.



## **INSPECTOR PROGRAMS 631**

## **Concrete National Standards**

Provided information on concrete testing according to American Concrete Institute National Standard. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 

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#### **INSPECTOR PROGRAMS 632** Admixtures, Mortar, and Grout

This course covers specifications and standards for the inspection of admixtures, mortar and grout. Material provided will focus on acceptance criteria purposes and types. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



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#### **INSPECTOR PROGRAMS 633**

#### International Code Council Reinforced Concrete Inspector

This course is design to provide students with the information required to review approved plans and specifications for special inspection requirements as mandated by the International Code Council (ICC). Students will learn how to comply with special inspection requirements of the enforcing jurisdiction. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 617.



#### **INSPECTOR PROGRAMS 634**

#### International Code Council Prestressed Concrete Inspector

This course is designed to provide students with the skills required to review approved plans and specifications to conduct Pre-stress Concrete Inspector to the specification of the International Code Council (ICC). Students will also learn how to comply with special inspection requirements of the enforcing jurisdiction. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS, 2 CREDIT HOURS,



#### **INSPECTOR PROGRAMS 635**

#### International Code Council Reinforced Masonry Inspector

This course is designed to provide students with the information required to review approved plans and specifications for masonry special inspection to the specification of the International Code Council (ICC). Students will cover the importance of complying with special reinforced masonry inspection requirements of the enforcing jurisdiction. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



## **INSPECTOR PROGRAMS 636**

#### International Code Council Bolt Inspector

Review approved plans and specifications for bolt inspection to the specification of the International Code Council (ICC). Students will cover the importance of complying with special bolt inspection requirements of the enforcing jurisdiction. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **INSPECTOR PROGRAMS 637**

## International Code Council Welding Inspector

This course is designed to review approved plans and specifications for welding special inspection to the specification of the International Code Council (ICC). Students will cover the importance of complying with special welding inspection requirements of the enforcing jurisdiction. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **INSPECTOR PROGRAMS 638**

#### **American Welding Society Certified Welding Inspector I**

This course will review various terminology and procedures of the American Welding Society welding standards D1.1 along with exercises to familiarize students with welding terminology and procedures. Writing assignments, as appropriate to the discipline, are part of the course.

**2 LECTURE HOURS. 2 CREDIT HOURS.** 



#### **INSPECTOR PROGRAMS 639**

#### American Welding Society Certified Welding Inspector II

This course is a continuation of AWS Welding Inspector I. It is designed to further acquaint students to the terminology, standards and procedures utilized in the welding industry. Upon completion of the course students will qualify to take the American Welding Society Certification Exam. This course contains both a preparatory class and the AWS CWI exam itself. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Inspector Programs 638.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **INSPECTOR PROGRAMS 640**

#### American Society of Nondestructive Testing **Magnetic Particles**

This course is designed to teach the fundamental knowledge of magnetic particle units and the principals behind it for weld inspections as specified by the American Society of Nondestructive Testing (ASNT). Materials provided will prepare students to take both level 1 and 2 American Society of Nondestructive Testing certification examinations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **INSPECTOR PROGRAMS 641**

#### **American Society of Nondestructive Testing** Liquid Penetrant

This course is designed to teach the fundamental knowledge of liquid penetrant units and the principals behind it for weld inspections as specified by the American Society of Nondestructive Testing (ASNT). Materials provided will prepare students to take both level 1 and 2 American Society of Non-Destructive Testing Certification examinations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LAB HOURS. 3 CREDIT HOURS.** 



#### **INSPECTOR PROGRAMS 642**

#### American Society of Nondestructive Testing Visual Testing

This course is designed to teach the fundamental knowledge of visual testing equipment and the principals behind it for weld inspections as specified by the American Society of Nondestructive Testing (ASNT). Materials provided will prepare students to take both Level 1 and 2 American Society of Nondestructive Testing certification examinations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **INSPECTOR PROGRAMS 643**

#### **American Society of Nondestructive Testing** Ultrasonic Testing

This course is designed to teach the fundamental knowledge of Ultrasonic testing units and the principals behind it for weld inspections as specified by the American Society of Nondestructive Testing (ASNT). Materials provided will prepare students to take both level 1 and 2 American Society of Non-Destructive Testing Certification examinations. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



## **INSPECTOR PROGRAMS 644**

Structure Steel Members and Fasteners

This course is designed to familiarize the inspector with the codes listed in American Institute of Steel Construction's Manual of Steel Construction. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



(кк)

## **INTERDISCIPLINARY STUDIES**

#### **INTERDISCIPLINARY STUDIES 101**

#### **College Success Course**

Introduction to academic skills that foster success in college and after college, critical thinking, reading, and writing as well as study skills, time management and stress management, and use of technology for communication and research. These skills will be learned through the topic of the course which will be based in the idea of "Self and Community," but will vary depending on the instructor and department teaching the course. Topics will be approached from a variety of perspectives that represent interdisciplinary academic inquiry, and students will consider how to take personal responsibility for academic and career choices through exploration of relationship between self and community. Students will be required to do either twelve hours of service learning related to the content of the course, or to meet other criteria for an equivalent number of hours spent in outside activities as determined by the instructor. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.

#### INTERDISCIPLINARY STUDIES 102

#### **Career Development and Decision Making**

This course helps students develop additional skills to aid in the transition from being a college student to being an employee. Learners will identify personal challenges that might affect their success and develop specific plans to address them. Overall, students will use critical thinking and self-reflection to develop soft skills that enhance employment preparedness. Writing assignments, as appropriate to the discipline, are part of the course.

#### 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **INTERDISCIPLINARY STUDIES 103**

#### **News Literacy and Civic Engagement**

Fundamental critical evaluation of diverse news formats through the application of information literacy and media literacy. Topics explored in relation to the culture of civic engagement. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Reading 125.



## **INTERDISCIPLINARY STUDIES 299**

#### **Independent Study and Service**

Students will engage in independent study to augment their educational plan. The course will engage students in service related projects and support activities such as professional networking, scholarly research, and attendance at seminars. Students will work outside the classroom setting and learn to become a practitioner in their field. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times, and count for a maximum of 9 credit hours.





## ITALIAN

## ITALIAN 101

#### First Course Italian

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



## **ITALIAN 102**

#### Second Course Italian

Continuation of Italian 101. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Italian 101, or consent of Department Chairperson.



## ITALIAN 103

#### **Third Course Italian**

Review and development of basic language skills, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Italian 102, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.

## JAPANESE

## JAPANESE 101

## First Course Japanese

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### JAPANESE 102

#### Second Course Japanese

Continuation of Japanese 101. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Japanese 101, or consent of Department Chairperson. 4 LECTURE HOURS. 4 CREDIT HOURS.

HW

## JAPANESE 103

## **Third Course Japanese**

Review and development of basic language skills, conducted in Japanese. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Japanese 102, or consent of Department Chairperson. 4 LECTURE HOURS. 4 CREDIT HOURS.



## LATIN

## LATIN COURSES 101

First Course Latin

This course is the study of the Latin language that includes mastery of vocabulary and grammar, accidence, syntax, and etymology. The courses focuses on developing skills and strategies for acquiring new vocabulary and the understanding of sentences structure that increases students' readiness to acquire other languages, related and non-related, and provides techniques that students can apply in many other fields. Students will analyze Latin roots of English words, parse and translate passages from Latin literature, recognize derivatives found in the Romance languages, and discuss the cultural content. (This course transfers to a four-year state universities as elective credit.) Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## LATIN COURSES 102

## Second Course Latin

This course is the study of more complex grammatical and syntactical constructions. The course will increase students' Latin vocabulary and understanding of etymology. Students will analyze Latin roots and English words, parse and translate more difficult passages from actual works of Latin literature, and continue to recognize derivatives found in the Romance Languages. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Latin 101 with a C grade or better or consent of Department Chairperson. 4 LECTURE HOURS. 4 CREDIT HOURS.



## LIBRARY AND INFORMATION SCIENCE

## LIBRARY AND INFORMATION SCIENCE 101

## Information Literacy

This course is to help students gain the information literacy skills that enable them to find, retrieve, gather, analyze, and use information so they can prosper as a student, citizen and life-long learner. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## LIBRARY TECHNOLOGY

#### LIBRARY TECHNOLOGY 101 Introduction to Library Procedures

Vocabulary, tools, systems, organization and equipment of modern libraries. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

WR

#### LIBRARY TECHNOLOGY 102 Multimedia Technologies

Clerical and supervisory duties in scheduling, circulation, maintaining, and operation of audio-visual and reproducing equipment. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **LIBRARY TECHNOLOGY 103**

### Library Tech: Children Services

Study of children's materials in all media, with emphasis on material for the preschooler through the sixth grade. Includes principles of evaluation and selection tools, basic reference materials, group activities and storytelling techniques, and methods of discipline in the library. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## LIBRARY TECHNOLOGY 125

#### Learning Resource/Library Practicum

Practice course in which students are placed in learning resource center/library situations. 20 hours per week plus two hour seminar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in LIB TECH 101.

1-2 LECTURE HOURS AND 10-20 LAB HOURS. 3-6 CREDIT HOURS.



#### LIBRARY TECHNOLOGY 201 Library Public Service

Clerical and supervisory duties required in reference and circulation areas. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.

WR

## LIBRARY TECHNOLOGY 203

#### **Materials Preparation Procedures**

Clerical and supervisory duties required in catalog departments; familiarization with commercially produced card catalog sets, classification tables and indices, subject headings, filing, cross referencing, typing forms and records. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Library Technology 101.

3 LECTURE HOURS. 3 CREDIT HOURS.

WR

## LIBRARY TECHNOLOGY 250

## Systems and Computer Technology of Libraries

Clerical informational and supervisory duties required in reference, circulation, ordering, receiving and verifying library materials. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## LINGUISTICS

## LINGUISTICS 101

Language and Culture

Examines the relationship between language and culture. Includes the language socialization of children, gender differences in language, standard varieties and dialects of language, the effects of language on thought, and the nature of language in personal relationships. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.

HW

## LITERATURE

#### **LITERATURE 119**

# English Literature from the Romantic Revival to the 20th Century

Important writers and representative literary forms. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



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# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## **LITERATURE 132**

### **Native American Literature**

Emphasizing perceptions and perspectives, this introductory course will examine the construction of Native American identity by exploring the works of different Native American writers and filmmakers. It will carry out its pursuit by engaging with and interrogating the Eurocentric view of the Native Americans and the Native Americans' view of themselves. The course will emphasize the history, style, and content of the literature, situating it in a political, social, and cultural context. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **LITERATURE 140**

#### **Great Books: Literary Sources of Art**

This course focuses on the Great Books Foundation's Great Books texts and examines literary works as inspiration for art. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## LITERATURE 157

#### **Graphic Novels**

The world of graphic novels is a vast universe of stories ranging from the realistic and contemporary to the supernatural and historical. Students will read and discuss representative works with some attention to critical work and increase their enjoyment and appreciation of a variety of graphic novels, genres and creators while determining literary meaning, form, and value. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## MANUFACTURING TECHNOLOGY TC1

#### **MANUFACTURING TECHNOLOGY TC1 104**

#### **Statistical Process Control**

This course introduces the use of statistical process control (SPC) which ensures that production systems maintain quality through predictive control of variations. Various distribution curves and statistical control charts are introduced through specific production problems. The interpretation and use of process and product control data is presented through simulations of real scenarios. The course will also prepare students for the Manufacturing Skill Standards Council's Quality Practices and Measurement exam. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 139, and Grade of C or better or concurrent enrollment in Mathematics 125; or consent of Department Chairperson.

## **3 LECTURE HOURS. 3 CREDIT HOURS.**



## MANUFACTURING TECHNOLOGY TC1 111 Machining Processes I

This course is an introduction to machine tools and metal-cutting processes used in manufacturing. Students complete projects that require precision layout, setup, machining, and inspection. These projects require students to perform various operations on engine lathes, drill presses and power saws. Students are also prepared to take the NIMS Level 1 Measurement, Materials and Safety test, and the MSSC Safety test. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Reading 99 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 112 Machining Processes II

This course is an introduction to machine tools and metal-cutting processes used in manufacturing. Students complete projects that require precision layout, set up, machining, and inspection. These projects require students to perform various operations on vertical milling machines, power saws and surface grinders. Students also have the opportunity to earn one or more NIMS Level 1 machining credentials including Job Planning Benchwork and Layout, Milling, Drill Press, and/ or Surface Grinding. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Reading 99 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.

## MANUFACTURING TECHNOLOGY TC1 123

**CNC Milling Operations and Programming** 

This course introduces the programming setup and operation of CNC machining center. Topics include programming formats, control functions, program editing, part production, and inspection. Various projects will strengthen students' skills in the proper use, programming, troubleshooting of this equipment. Students will also earn the NIMS level 1 CNC Milling Program, Setup, and Operate credentials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 140 and 112-1, or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



## MANUFACTURING TECHNOLOGY TC1 137

**CNC Turning Operations and Programming** 

This course introduces the programming, setup, and operation of Computer Numerical Control (CNC) turning centers. Topics include: programming formats, control functions, program editing, part production and inspection. Various projects will strengthen students' skills in the proper use, programming and troubleshooting of this equipment. Students will also have the chance to earn the NIMS Level 1 CNC Turning Program, Setup, and Operate Credential. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 140 and 111-1 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



## **MANUFACTURING TECHNOLOGY TC1 138**

#### Introduction to Solidworks

This course covers part modeling, detailing and assembly design using SolidWorks software. SolidWorks is a feature-based parametric solid modeler used for mechanical design and manufacturing. The topics include the basic functions needed to use SolidWorks to create parts, assemblies and production drawings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 99 and Grade of C or better in Manufacturing 139 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## MANUFACTURING TECHNOLOGY TC1 139

#### **Print Requirements: Quality Assurance**

This course focuses on the fundamentals of print reading and the measuring skills needed to verify print requirements. Visualization of 3D objects from orthographic views and the use of micrometers and dial calipers are stressed. The concepts of Geometric Dimensioning and Tolerancing, and quality tools (such as Pareto diagrams and fishbone charts) are introduced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 98 and Reading 99 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### MANUFACTURING TECHNOLOGY TC1 140 CNC Fundamentals

This course introduces students to the CNC process, the operation of the CNC lathe and mill, and to the basic set up, tooling, operation, and trouble shooting of CNC Machining. Students will earn at least one NIMS Level 1 CNC Operator credential. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 99 and Grade of C or better in Manufacturing 111-1 or 112-1 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 141 Manufacturing Materials and Processes

The course will provides a general understanding of the behavior of the materials commonly used in manufacturing; the basic techniques used in processing them into useful products, the scientific theory underlying those processes, and the criteria for selecting particular tools, machines, and processes. Students will have the opportunity to earn the MSSC Manufacturing Processes and Production credential. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Reading 99 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **MANUFACTURING TECHNOLOGY TC1 142**

## **Geometric Dimensioning and Tolerancing**

This course expands upon students' basic knowledge of mechanical drawings by adding form and feature controls in order to meet assembly requirements at the lowest cost. The differences between traditional dimensioning and geometric dimensioning will be stressed. This course prepares students for an ASME certification in GDT. Writing assignments, as appropriate to the discipline, are part of the course.

 $\label{eq:prerequisite(s): Grade of C or better in Manufacturing 139 or consent of Department Chairperson.$ 

## 3 LECTURE HOURS. 3 CREDIT HOURS.

**MANUFACTURING TECHNOLOGY TC1 143** Advanced Metrology

The course focuses on the use of the Coordinate Measuring Machine (CMM) and the optical comparator to inspect machine parts to the current ASME Y 14.5 Geometric Dimensioning and Tolerancing (GDandT) standards. Lab exercises will focus on the set up and operation of precision measuring tools, including the CMM and the optical comparator, to inspect complex parts. Bore gages, attribute gages, gage blocks and pins and their use in calibration will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better or Concurrent enrollment in Manufacturing 142 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 144 Wire Electrical Discharge Machining

The course covers operations and procedures for Wire Electrical Discharge Machining systems (Wire EDM). The course content includes an overview of the Wire EDM, EDM operating processes, EDM machine functions, EDM manual part programming, and EDM application in tool rooms and production. Students may also earn the NIMS Wire EDM credential. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 140 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 145 Computer Integrated Manufacturing (CIM)

Students will study aspects of automated assembly and process control, including programmable controllers, computer assisted part programming, CAD/ CAM systems computerized instrumentation and robotics. This course stresses a systems approach and how hydraulic, pneumatic and electromechanical components function together as a system. Troubleshooting automation is a major activity of this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 291 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 146 Team Dynamics in Manufacturing

This course provides an exploration into how employees work in groups for the

completion of organizational objectives. Emphasis is placed on the growing dependency on self-directed work teams in a manufacturing environment. This course equips students with the ability to manage work teams, work in teams successfully, and to obtain the results via team dynamics. In addition, impacts upon customer satisfaction are explored. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Reading 125 or consent of Department Chairperson.



#### MANUFACTURING TECHNOLOGY TC1 151

#### Introduction to Welding

This is a beginning welding course that teaches basic welding skills that lead to an American Welding Society qualification Gas Metal Arc Welding (GNAW or MIG). Topics include metallurgy, welding processes, welding safety, and steel designations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Reading 99 or consent of Department Chairperson. 6 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 152 Intermediate Welding

This is a second welding course that teaches basic welding skills that lead to an American Welding Society (AWS) qualification in Gas Tungsten Arc Welding (BTAW or TIG) and/or Shielded Metal Arc Welding (SMAW or Stick). In addition to teaching the theory and practice of GTAW and SMAW welding processes, the course including training in welding with a FANUC robot, resistance welding and torch work. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 151.

6 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 191 Industrial Electricity

A study of DC and AC electricity as applied to industrial circuits. The topics include: fundamentals of circuit analysis, single and three phase circuits; and parameters, safety issues in industrial electricity, such as current, voltage and power and troubleshooting methods using test equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 99 and Reading 99 or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 201 Supervised Work Based Learning

Supervised Work Based Learning is designed to provide an opportunity to perform in an industrial setting. Students are placed in a college-approved employment situation for eight weeks on a full-time basis. Writing assignments, as appropriate to the discipline, are part of the course.

15 LAB HOURS. 3 CREDIT HOURS.



## MANUFACTURING TECHNOLOGY TC1 207

#### Introduction to MASTERCAM

This course trains students to use MASTERCAM software to create programs that will drive computerized machine tools (CNC machines). These "g-code" programs are generated from part geometry created in MASTERCAM software or in a computer-aided-drawing (CAD) software such as Solidworks. Students will learn to create part geometry, generate toolpaths, assign appropriate tools to the toolpaths, and upload their program to a CNC machine, which will precisely cut the part from metal stock. Student projects will focus on 2-D milling operations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 140 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



# MANUFACTURING TECHNOLOGY TC1 253 Pneumatics

Study of the basic principles of pneumatics with emphasis on schematics, valves, actuators, compressors, instrumentation, applications, and troubleshooting. Course also includes the use of supplier catalogs and technical manuals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 98 and Reading 99 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 255 Industrial Hydraulics

This course is a study of basic principles of hydraulics. The topics in this course include schematic interpretation, valves, actuators, compressors, line sizing, fluid viscosity and reservoir capacity. This course will also includes the use of supplier catalogs and technical manuals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 98 and Reading 99 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 291 Programmable Logic Controllers

This course covers the basic concepts and skills needed to program and use programmable logic controllers (PLC's) in automated systems in industry. The topics include an overview of basic terminology, ladder logic programming, memory structure, and processing. Students will use PLC's to control electromechanical devices, pneumatic actuators, and other industrial components. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 191 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 292 Principles of Mechanisms

This course covers the basic principles of industrial mechanisms. The motion characteristics of drive mechanisms, bearings, lubricants, cams, gears, pulleys are covered in the context of manufacturing processes and factory automation. Troubleshooting and maintenance procedures used in industrial settings are stressed throughout. Students completing the course will be prepared to earn the Manufacturing Skill Standard Council's Maintenance Awareness module of the Certified Production Technician credential. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Mathematics 99 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MANUFACTURING TECHNOLOGY TC1 295 Electrical Motor Controls

A study of different types of electrical motor controls as they are applied to industrial circuits. The topics include safety issues, instrumentation, and the interpretation of line diagrams. An overview of different types of motor controls is also provided. The student will be able to troubleshoot and repair problems associated with different motor control applications of the industry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 340MFGT 191 or consent of Department Chairperson. **1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.** 

DA

## MANUFACTURING TECHNOLOGY TC1 297

#### **Advanced Mechanical Systems**

This course builds on the concepts elaborated in Manufacturing 292-Principles of Mechanisms. Topics include: Mechanical Drive Systems, Basic and Key Fasteners, Power Transmission Systems, V-Belt Drives, Chain Drives, Heavy Duty V-Belt Drives, V-Belt Selection and Maintenance, Lubrication Concepts, and Torque and Power Measurement. Students will also learn how to select the proper hand and power tools, ratchets, torque, wrenches, and torque settings for equipment assembly. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Manufacturing 292 or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



## MATHEMATICS

#### **MATHEMATICS 98**

#### **Beginning Algebra with Geometry**

Algebra of real numbers, integer exponents, polynomial operations, factoring, rational and complex expressions, linear equations, word problems, quadratic equations and graphical and algebraic solutions of simultaneous linear equations. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Grade of C or better in FS Mathematics 3001 and FS Mathematics 3002, or COMPASS placement test score within ranges for Pre-algebra (29-99) and Algebra (15-23). 4 LECTURE HOURS. 4 CREDIT HOURS.

## 

#### **MATHEMATICS 99**

#### Intermediate Algebra with Geometry

Algebraic operations involving rational exponents, including scientific notation. Algebraic expressions, including radical and rational expressions. Solutions of quadratic, quadratic in form, rational, radical, and absolute value equations. Solutions of compound linear inequalities. Solutions and manipulations of literal equations of literal equations. Graphical and algebraic solutions of systems of linear equations in two and three variables; graphical solutions to systems of linear inequalities. Graphs of linear and quadratic equations. Geometry topics: perimeter, are of geometric figures, triangles, rectangles, and circles; volume of sphere, cylinder and pyramid. Pythagorean Theorem and distance formula. Similarity and proportions. Applications of problem-solving skills are emphasized throughout the course. Students should be exposed to graphing calculator technology and/or computer algebra systems. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Grade of C or better in Mathematics 98, or Grade of S in FS Mathematics 3004, or COMPASS placement test score within ranges for Pre-algebra (17-99) and Algebra (24-42), or consent of Department Chairperson.

**5 LECTURE HOURS. 5 CREDIT HOURS.** 



#### MATHEMATICS 107 Mathematics for Technicians I

Designed to provide mathematical tools for students in terminal technical curricula. Emphasis is on practical aspects of mathematics and less upon the theoretical. Topics include elementary algebra operations, simultaneous and quadratic equations, exponents and radicals, logarithms, introduction to trigonometry, vectors, and use of calculator. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

1-5 LECTURE HOURS. 1-5 CREDIT HOURS.



## MATHEMATICS 108

## Mathematics for Technicians II

Continuation of Mathematics 107. Topics include trigonometric functions, solution of oblique triangles, vectors, Cartesian and polar coordinate systems, graphs of functions and basics of differential and integral calculus. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 107, or consent of Department Chairperson.

3-5 LECTURE HOURS. 3-5 CREDIT HOURS.



#### MATHEMATICS 140 College Algebra

Algebra of real and complex numbers, functions, algebraic and graphical solutions of linear, quadratic and systems of equations. Logarithmic and exponential functions. Additional topics from determinants, sequences, series, the Binomial Theorem, Mathematical Induction, and elements of the Theory of Equations. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Grade of C or better in Mathematics 99, or COMPASS placement test score range within Pre-algebra (17-99) and Algebra (43-99) and College Algebra (1-50), or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### **MATHEMATICS 143**

#### Precalculus

Precalculus mathematics focuses on mathematical reasoning and solving problems to improve the mathematical skill of students. The following topics from algebra and trigonometry are studied in depth: review of algebraic concepts, functions and graphs, conic sections, solution of systems of equations, theory of equations, sequences, series, binomial theorem, permutations and combinations, trigonometric functions and their graphs, trigonometric identities and equations, solution of triangles applications, inverse trigonometric functions. The use of graphing, calculators and computers is strongly recommended. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 99, or COMPASS placement test score range within Pre-algebra (17-99) and Algebra (43-99) and College Algebra (1-50), or consent of Department Chairperson.

**6 LECTURE HOURS. 6 CREDIT HOURS.** 



#### **MATHEMATICS 202**

#### Number Concepts/Mid-School Teaching

This course has been designed keeping in mind both the Illinois Professional Content Standards for Teaching (Mathematics) and the content necessary to prepare students to be middle school mathematics and science teachers. A wide range of topics across number of theory and measurement will give students a grasp of the depth and breadth of mathematics outside of the traditional course structure. Problem-solving, estimation, measurements, and construction of simple theories of numbers will be treated with and without the use of technology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 113, 126, 140, or 143.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## MATHEMATICS 210

#### **Differential Equations**

A first course in ordinary differential equations: solutions of first order and first degree differential equations, linear differential equations with constant co-efficients. Linear differential equations of higher order, special differential equations of second order and differential equations of first order but not of first degree. Numerical methods, series solutions and applications included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 208, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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IAI: WR IAI/MAJOR: DA OH TR WR

## **MATHEMATICS 212**

#### Linear Algebra

Introduction to linear algebra for students who have studied some calculus; computations with vectors and matrices will be emphasized, proofs also will be examined; major topics include systems of linear equations and matrices, determinants, vectors in Euclidean space, abstract vector spaces, linear mappings, computation of eigenvalues and eigenvectors. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 208, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: DA MX TR HW WR

#### **MATHEMATICS 216**

#### **Statistics for Business Majors**

The basic concepts of statistical analysis used in business decision-making, including probability and how uncertainty is dealt with in real life. The student will analyze and work out simple problems and should be able to recognize applications of different statistical techniques, interpret the results of analysis and recognize instances in which statistical techniques have been misused. The following concepts and statistical techniques are included: measure of central tendency and variability, random variable and probability distributions, estimation, tests of hypotheses, chi square tests, linear regression and correlations and one-way analysis of variance. Applications are included throughout the course. Problem-solving with the use of calculators and computers is emphasized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



IAI/MAJOR: DA KK TR

## MATHEMATICS 299

## **Special Topics Mathematics**

Special Topics in Mathematics will be discussed along with appropriate computer and calculator activities. New developments will be emphasized, especially materials useful in K-12 education and industry. Each special topic course will have a sub-title. Students can take courses with different sub-titles and receive credit for each. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1-5 LECTURE HOURS. 1-5 CREDIT HOURS.



## MEDIA COMMUNICATION

## **MEDIA COMMUNICATION 102**

## Announcing

Develops the ability to transform written copy or script into voice performance emphasizing copy preparation, breath control, pronunciation, articulation, use of full dynamic range, microphone techniques, and hand signals. A variety of copy, including commercials, news and public service announcements will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: KK

#### **MEDIA COMMUNICATION 145**

#### Introduction to Media Communication

A survey of the history, technology, structure and operation of the telecommunications industry. Topics include advertising, audience measurement, network television, radio station operations, cable television, broadcast regulations and licensure, satellite communications, pod casting, and careers in media communications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### MEDIA COMMUNICATION 160 History of Radio Genres

An in-depth look at the progression of radio since its inception, as well as examination of the huge impact that it had on American culture. Introduction to the different radio genres, and the will examine the drastic transition those genres have undergone over the years. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### MEDIA COMMUNICATION 170 The History of Television

An in-depth look at the progression of television since its inception and examination of the massive impact that its existence has had on American culture. Students will also study the different television program genres, such as soap operas, sitcoms, newscasts, reality shows, and many others, as they examine the sweeping changes that have taken place in television programming over the past several decades. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### MEDIA COMMUNICATION 190 Language, Culture and Media

Television, radio, print and film reflect and transmit culture through language and images. Using these media as a context, this course will examine a variety of depictions of culture and language and will evaluate perceptions about language and culture within various segments of society. Students will be encouraged to think critically about language choices and to analyze the impact of culture and media on those choices. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

## **MEDIA COMMUNICATION 203**

## Media Writing

Creation and preparation of scripts for radio and television programs and segments which include news copy, commercial copy, public service announcements, continuity and dramatic copy. Special attention will be paid to correct format and form. Word processing skills will be utilized in this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101.

3 LECTURE HOURS. 3 CREDIT HOURS.



IAI/MAJOR: KK

#### **MEDIA COMMUNICATION 210**

#### **Radio and TV Workshop**

Workshop in both mediums, emphasizing variety of producing on the air programs, location instruction and televising of meetings, plays, sports events for TV and radio; both media will be used to compare and isolate various techniques of each area. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **MEDIA COMMUNICATION 221**

#### Radio Production I

Introduction to the audio control system and training in the operation of related equipment. Emphasis will be placed on how the various components integrate into a system. Demonstration of expertise through class exercises and laboratory projects is required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or Grade of C or better in English 100, and concurrent enrollment in Media Communications 145, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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IAI/MAJOR: KK

## MEDIA COMMUNICATION 222

## **Radio Production II**

Review the audio control system and its various equipment components. Emphasis will be placed upon creating, producing, and directing service announcements, news and drama which may be utilized by Kennedy-King's own WKKC-FM. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 221, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **MEDIA COMMUNICATION 223**

#### **Advanced Broadcast Writing**

As a direct continuation of course Media Communications 203–Media Writing. This class provides experience in writing longer scripts, for various types of media outlets such as television, radio, and the Internet. With an emphasis on content, clarity and flow. Basic script formats, terminology, and writing techniques for documentaries, commercials, public service announcements, promos, as well as entertainment and fictional programs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101 and Media Communications 203. 3 LECTURE HOURS. 3 CREDIT HOURS.



## MEDIA COMMUNICATION 224

#### Broadcast Performance

Enhances and extends the skills developed in Media Communications 102– Announcing. Develops the ability to perform in various on-air capacities in radio, television and other broadcast formats, emphasizing copy analysis and preparation, ad-libbing, constructive self-critiques, and development of personality, style and conversational delivery. Use of full dynamic range, microphone techniques, and hand signals will be emphasized. A variety of copy and situations, including hosting, anchoring, reporting, commercial announcing, and other specialties will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100, and Grade of C or better in MEDIACOM 102 and MEDIACOM 203, or consent of Department Chairperson. 4 LECTURE HOURS, 3 CREDIT HOURS.

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#### MEDIA COMMUNICATION 231 TV Production I

Introduction to the television production system and training in the operation of the video and audio equipment necessary to produce programming. Emphasis will be how the various components integrate into a system. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or Grade of C or better in English 100, and concurrent enrollment in Media Communications 145, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

## KK MX

IAI/MAJOR: KK

#### MEDIA COMMUNICATION 232 TV Production II

Continuation in the development of expertise in the use of various audio and video components. Television production projects will require creating treatments, storyboards, and scripts, for the production of a final program. Emphasis on integration of equipment, production personnel, and script to create finished television production. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 231, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MEDIA COMMUNICATION 234 Producing for Television

An examination of the vital role of the television producer, focusing on the three areas of production: pre-production, production, and post production. Emphasis on the importance of planning, show creation, budgeting, scheduling, management, team building, field producing, and delivery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 231, or consent of Department Chairperson.

#### 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **MEDIA COMMUNICATION 240**

#### **Minicam and Videotape Editing**

Evaluate, set-up, light, mike, and properly record in a single-camera remote environment for desired production results. Learn to log and electronically computer edit recorded footage into professional programs and program segments. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 231 or 232, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MEDIA COMMUNICATION 241 Video Editing

Introduction to the fundamentals of digital non-linear editing concepts and practices. Basics of importing (digitizing) video; basic editing techniques, trimming clips, basic effect palettes, overlaying audio with video, recording narration and music; and saving the finished production to digital as well as Quick time file. Students learn to storyboard their ideas and develop the ability to edit in sequence to tell a story. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 231 and 240. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **MEDIA COMMUNICATION 242**

#### **Television Graphics**

The important function of television graphics in the packaging of television programs will be emphasized. The main focus of the course will be the operation of the character generator, digital effects generator, still store, 35mm projector, 16mm projector, and learning the graphics capabilities of the video switcher and their use in graphics packaging. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 231 or 241, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### MEDIA COMMUNICATION 244

#### **Advanced Video Gripping and Lighting**

Advanced television production experience, focusing on both in studio multicamera productions, with an emphasis on production (lighting, equipment setup, etc.) as well as single camera EFP (electronic field production), and ENG (electronic news gathering) techniques. Students will examine the tools and techniques of lighting for television, both on location and in the studio. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100 and Grade of C or better in Media Communications 231 and 240, or consent of Department Chairperson.

4 LECTURE HOURS. 3 CREDIT HOURS.



## **MEDIA COMMUNICATION 245**

## **Advanced Production Workshop**

Learn the steps necessary to develop a program concept or idea into a completed radio and/or television program. Emphasis is placed upon the coordinating of technical, budgetary, personnel, scheduling, and equipment aspects of achieving effective productions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 222 and 232, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

#### MEDIA COMMUNICATION 260 Media Sales and Marketing

A study of sales and marketing relative to broadcasting and cable television. Introduction to the principles of packaging a product for sale to advertisers and program buyers. Review of organization management at television stations, networks, and cable outlets, and Internet Service Providers(ISP). Emphasis is placed upon theoretical and practical aspects of developing presentation skills including instruction and utilization of media research materials such as rating books in positioning sales. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 145, or consent of Department Chairperson.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**

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## MEDIA COMMUNICATION 261

#### **Project Management and Team Dynamics**

Basic principles of management, including the role of "executive producer" of a media related project. The course emphasizes skills and techniques used for goal setting, strategic planning, organization, communication, risk management, and team collaboration. Student will work together in production teams, as they conceptualize, design and execute a digital media production project. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100 and Media Communications 221 and 231, or consent of Department Chairperson.

4 LECTURE HOURS. 3 CREDIT HOURS.



#### MEDIA COMMUNICATION 270

#### Introduction to Radio and TV Programming

Survey of programming from various perspectives, including: comparison and contrast of major network approaches versus approaches of independent producers. Introduction to program strategies through elements to be considered in positioning programs on the air. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Media Communications 145, 221, and 231, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### MEDIA COMMUNICATION 271

#### Introduction to Interactive Media

A practical introduction to interactive media, otherwise known as the Internet. While in this course, students will become better acquainted with new technologies and methods for creating participatory media, while making it available through nontraditional outlets. Students will develop new ideas for assisting in this tradition, with both the Internet, as well as the traditional broadcast space. Class topics will also cover the technologies that go hand in hand with both the creation and utilization of interactive "new" media. This course will emphasize group projects. Students will be introduced to the unique issues encountered while producing for interactive media, such as streaming, bandwidth, compression, memory allocation, and optimization. Various distribution media will be examined including CD-ROM, DVD, and the Internet. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100, Media Communications 145, and Computer Information Systems 120, or consent of Department Chairperson.



## **MEDIA COMMUNICATION 272**

## Advanced AUD/VID Production: Interactive Media

Provides advanced practical knowledge and experience in the area of digital video production as it relates to interactive media. Students will explore further the changes and technical challenges associated with web-based video as a communication medium. Through group and individual projects, students will learn to use interactive delivery systems to create effective user experiences. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, or Grade of C or better in English 100, and Media Communications 231 and 271, or consent of Department Chairperson.

4 LECTURE HOURS. 3 CREDIT HOURS.



## **MEDIA COMMUNICATION 295**

## **Practicum Internship**

Planned and supervised training which allows the application of theory to actual practice prepares a student for working independently toward specific career objectives. The internship/practicum generally occurs after students has completed eighteen Media Communications credit hours. It takes place at a regular worksite and instruction/supervision is provided by an employee at the worksite. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



## **MEDIA COMMUNICATION 298**

## Audio, Video or Internet Capstone

After satisfactory completion of all Media Communications courses, this course is intended to provide students with the opportunity to integrate their television, radio, and internet skills by preparing an actual portfolio suitable for employment in the media industry. With an emphasis on quality, the Capstone portfolio will feature a variety of product projects to showcase specific, industry related skills obtained while enrolled in the Media Communications program at Kennedy-King College. In addition, students will create a marketing package for themselves, including a resume, business cards, interactive website, and audition/resume disk. Student must obtain consent of Program Director to take this course concurrently with their internship course, Media Communications 250. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 2 LAB HOURS, 3 CREDIT HOURS,



## **MENTAL HEALTH**

## **MENTAL HEALTH 223**

#### Introduction to Addictions Studies

Includes treatment strategies, perspectives and understanding of the addiction process and its effects upon the individual, the family, employers, and society. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **MENTAL HEALTH 224**

## **Principles and Practices of Addiction Studies**

Basic clinical skills in alcoholism and substance abuse field; strategies in working with denial and resistance; diagnostic and assessment skills; history-taking; individual, family and group treatment modalities utilized with the alcoholic and/ or substance abuser; termination process; aftercare and referral process. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mental Health 223, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### MENTAL HEALTH 228 Principles of Mental Health Practices

Mental health, the settings in which mental health problems are treated, and common types of mental health problems; review of treatment strategies and methods of intervention. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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## **MENTAL HEALTH 229**

## **Practicum in Addictions Treatment**

Students work 20 hours per week in a mental health setting in the community under supervision of mental health professionals and participate in a two-hour seminar once a week, relating field experiences to mental health theory. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in MENHLTH 228, or consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.

HW

## **MENTAL HEALTH 230**

## Addictions and Family Treatment

Study of affects of alcoholism and substance abuse of the family; how spouse, children and extended family react to problematic drinking or drug abuse; examination of treatment including self-help groups. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mental Health 223 and Mental Health 224, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **MENTAL HEALTH 231**

## **Addictions Treatment of Special Populations**

Application of needs of special treatment populations, diagnosis and treatment of adolescent and elderly clients, sexual issues; patient education, prevention strategies, spirituality, relapse prevention and employee assistance programming, AIDS and eating disorders. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mental Health 223 and Mental Health 224 and Mental Health 230, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



MICROBIOLOGY

## **MICROBIOLOGY 233**

## **General Microbiology**

Morphology, physiology, classification and culture of bacteria and related organisms. The role of bacteria related to human welfare and to plants and animals. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated eight credit hours will be counted towards graduation.

Prerequisite(s): Grade of C or better in Biology 121.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **MICROBIOLOGY 234**

## **Applied Microbiology**

A sequence course to a second semester fundamentals course in microbiology. This course is designed for students majoring in biotechnology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Microbiology 233.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.

## TR

## MICROBIOLOGY 236

## Applied and Environmental Microbiology

The goal of this course is to learn about the use of microorganisms (bacteria, archaebacteria, protists, fungi, and viruses) in the population of pharmaceuticals, foods, and industrial chemicals, as well as in applications such as bioremediation. Specifically, genetic engineering and biotechnology will be discussed. Secondly, interaction of microorganisms with other organisms and the physical environmental will be explored. In particular, microbial ecology, biogeochemical cycles, and public health microbiology will be addressed. Field sampling methods and analytical techniques (including molecular biology methods) will be utilized. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 121.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **MORTUARY SCIENCE**

## **MORTUARY SCIENCE 102**

## **Microbiology for Embalmers**

The basic principles of microbiology related to the principles of funeral service education, especially as they pertain to embalming sanitation, morgue disinfection, public health, and embalming practice. The development and use of personal, professional and community hygiene and sanitation is discussed. The methods of transmission of infectious diseases, control procedures of these diseases with special emphasis on protection to the embalmer are described to differentiate between indigenous microorganisms and pathogens and/or opportunists causing diseases commonly associated with the human host and dead human remains. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 120, Biology 121 and Health Science 102. 3 LECTURE HOURS. 3 CREDIT HOURS.

## MX

#### MORTUARY SCIENCE 103 Chemistry for Embalmers

The basic principles of chemistry related to the principles of funeral service education. Especially stressed are the principles and precautions involved in the sanitation and disinfection of dead human remains, focusing strictly on chemistry and embalming chemicals, modifying agents, supplemental fluids and autopsy compounds. Potentially harmful chemicals used in the preparation room and their regulations are emphasized along with the essential characteristics of fermentation, and putrefaction in the area of the chemistry of decomposition of dead human remains. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 120, Biology 121 and Health Science 102. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

MX

#### MORTUARY SCIENCE 104 Pathology for Embalmers

This course in Pathology is designed to study the pathological conditions of the human body in its postmortem state and how those pathological conditions affect various parts of the body, with particular emphasis on those conditions which relate to or affect the embalming or restorative art process. Pathological conditions discussed will dictate the embalming procedures, methods and chemicals for preservation required by the embalmer. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 120, Biology 121 and Health Science 102. 3 LECTURE HOURS, 3 CREDIT HOURS,



## MORTUARY SCIENCE 108

**Accounting in Funeral Service** 

An introduction to basic principles of accounting theory. Applications to funeral home operations are made throughout financial statements and their analysis, worksheets, journalizing, receivables, payables, deferrals and accruals. Inventory cost models for funeral merchandise, is covered along with depreciation models and payroll accounting. Accounting proficiencies will enable the understanding of funeral service records and the funeral directors guidelines of funeral arrangements as prescribed by Federal Trade Commission Regulations rule on funeral industry practices. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into the Mortuary Science Program/Plan 257.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **MORTUARY SCIENCE 109**

**Sociology for Funeral Service** 

Sociology studies family structures, social structures, and the factors of change within those groups. This course relates those factors of change to the impacts of death and the relationship of the role of the funeral director in providing closure through funeral rites, ceremonies, customs, religion and rituals. Emphasis is placed on the cultural requirements and diversities of each family the funeral director is privileged to serve and an awareness of the changing social factors, which affect American Funeral Rites and the families served. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into the Mortuary Science Program/Plan 257.





## **MORTUARY SCIENCE 111**

## **History of Funeral Service**

Survey of current expectations in American Funeral Practice with emphasis on task and personality of the practitioner. Trends and issues in embalming practice from ancient Egyptian burial rites to current American practices and foreign procedures. Blackboard (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into the Mortuary Science Program/Plan 257.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### MORTUARY SCIENCE 203 Funeral Directing

This course recognizes the wide variation of funeral customs across the country, attempting to point out some general practices that contain minimal geographic and cultural differences, including general information on notification of death, transfer of remains, conduct of the arrangement conference, pre-funded/ preplanned funerals. Included is the cross-section of religious funeral practices, fraternal and military funerals, shipment of remains, cremation and aftercare. Guidelines for the course are designed to introduce the Federal Trade Commission and the Trade Regulation Rule on Funeral Industry Practices. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mortuary Science 111.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **MORTUARY SCIENCE 204**

Mortuary and Business Law

The student is introduced to the sources of law, the legal status of the dead human body. The funeral directors responsibilities are examined as practicing professionals in relationship to that of the final disposition. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Completion of two semesters in the Mortuary Science Program/Plan 257.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **MORTUARY SCIENCE 207**

#### **Restorative Art**

Study of techniques employed to bring about restoration of a deceased human being to as near a normal appearance as possible. The subject area for restorative art is designed to introduce the techniques and importance of creating an acceptable appearance of the deceased for the benefit of the surviving family members. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Biology 226 recommended.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **MORTUARY SCIENCE 209**

## **Funeral Management and Merchandise**

This course covers the construction and features caskets, outer burial containers, and other funeral related products such as cemetery headstones and markers. Merchandising examines methods of purchasing, pricing, display, and sale of funeral merchandise as well as services. Emphasis are placed on the component parts of funeral merchandise, including materials used, component part styles, finishes, dimensions/functions and pricing methods. General management techniques and theory as they relate to specific funeral home operational procedures and practices are emphasized. Management examines specific areas of funeral service practice and the managerial guidelines for the contemporary concepts of funeral service management as they relate to client families and community, staff personnel, and professional associates and associations/agencies. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Mortuary Science 203.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

MX

#### **MORTUARY SCIENCE 210**

#### **Advance Mortuary Science Practice/Ethics**

A survey of topics presented by the Director of the Mortuary Science Program/ Plan, providing an overview of various tasks and subjects a director will encounter in the role of a practitioner. Legal and Moral Ethics are covered. An overview of the curriculum and the practical application of theory as it relates to the ethnical practice of mortuary science. Exit examinations/core competency capstone course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS. 2 CREDIT HOURS.

MX

#### **MORTUARY SCIENCE 211** Psychology of Funeral Service

The underlying value and relevance of this course for preparing the funeral director is that the symbolic and ritualistic aspects of the funeral have a significant impact upon the emotional experience of the bereaved. Emphasis on the grief process and its variations across individuals as influenced by psychological factors aids the funeral director in becoming a facilitating agent for effective mourning through personal interactions as well as the design and implementation of the funeral service. This course will also prepare the funeral director to know when to make a referral for mental health services. Issues relating to children and death and particular theories/theorist are also stressed. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Acceptance into Program/Plan 257 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## MORTUARY SCIENCE 213 Embalming Theory I

The involvement of all aspects of embalming theory. From the evaluation of features to the case analysis, embalming reports and instrumentation. A study of phenomenon of death in the human body is detailed. Theory I includes the study of government regulations applicable to the embalming process. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mortuary Science 102, 103 and 104.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **MORTUARY SCIENCE 214**

## **Embalming Laboratory**

Practical application of embalming techniques and laboratory procedures of the deceased human body. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Mortuary Science 102, 207, 213, 215, 216 and Biology 226, 227, 130, 131.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### MORTUARY SCIENCE 215 Restorative Art Laboratory

Applied experience in restoring damaged human remains to achieve a normal life appearance of the deceased. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mortuary Science 207, Biology 226 and 227.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MORTUARY SCIENCE 216**

## Embalming Theory II

Course examines the difficulties encountered by the embalmer due to disease and pathological changes of the deceased, examination of preparation of autopsied cases as well as the procedures for handling and embalming more difficult cases. Theory II includes the study of special treatments and techniques for different conditions encountered in the dead human body. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mortuary Science 213, Biology 226, 227, 130, and 131. 3 LECTURE HOURS. 3 CREDIT HOURS.



## MUSIC

## MUSIC 102

## **Music Theory I**

Realization of figured and unfigured bases and harmonization of melodies. Triads and inversions. Harmonic analysis. Keyboard application. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 101, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## MUSIC 103

Music Theory II

Realization of figured and unfigured bass and harmonization of melodies. Chords of the seventh and ninth sequences, diatonic modulation. Harmonic analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 102, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### MUSIC 105 Group Piano I

Class instruction in beginning piano techniques through study in small groups. Writing assignments, as appropriate to the discipline, are part of the course.



#### MUSIC 106 Group Piano II

Continuation of Music 105. Minimum of six hours practice per week required for credit. Students majoring in music are required to take two semesters of study with a private instructor following this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 105, or consent of Department Chairperson.





## **MUSIC 107**

## Jazz Improvisation Part I

Fundamentals of improvisation; performing improvised solos, both on standard chord changes and original compositions. Topics covered include: ear training, II-V-I progressions, substitutes of the Ii-V-I progression, simple blues, bebop scales, intervals and random chord exercises which lead to altered dominants and more contemporary concepts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 101 and concurrent enrollment in Music 135, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MUSIC 108**

## Jazz Improvisation Part II

Further study of improvisation: performing improvised solos on standard chord changes and original compositions. The covered topics include altered dominant seventh chords, the 12-tone row, advanced blues, rhythm changes, turnarounds, learning tunes by ear, and improvising on them, extensions, substitute chords, modal harmony, free improvisation, note positions and other scales. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 107 and concurrent enrollment in Music 135, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### MUSIC 109 Jazz/Pop Ensemble

Rehearsal and performance of songs from jazz and popular music repertoires. In addition, the course will cover the skills needed as a professional musician. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### MUSIC 110 Jazz/Pop Ensemble: Blues Emphasis

Rehearsal and performance of songs in the blues genre. In addition, the course will cover the skills needed to succeed as a professional musician. Repeatable for credit up to four credit hours. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.



## **MUSIC 111**

## Aural and Keyboard Skills I

Sight singing, ear training and rhythmic dictation with keyboard application. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 101, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MUSIC 112**

#### Aural and Keyboard Skills II

Continuation of Music 111. Advanced ear training and sight singing, melodic dictation and more complex harmonic structures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 111, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## MUSIC 113

#### String Class

Class instruction in fundamentals of violin, viola, violoncello and string bass; principles of bow control and elementary left hand technique; each student required to demonstrate techniques and develop performing technique; readings to be assigned. Writing assignments, as appropriate to the discipline, are part of the course.

#### 1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## MUSIC 114

## **Guitar Class**

Programmed, audio-visual music course, emphasizes the development of guitar playing skills. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## MUSIC 119

## **Percussion Class**

Class instruction in percussion instruments; each student required to demonstrate techniques and develop performing ability; readings to be assigned. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MUSIC 120**

## Introduction to Music Business

Overview of the music business including recording, publishing, management, marketing and other related topics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **MUSIC 122**

## **Perspectives in Jazz**

Introduction to jazz, its historical background and its development in the United States. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## **MUSIC 133**

## Concert Band

Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 4 times.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 0.5 LAB HOUR. 1 CREDIT HOUR.



## **MUSIC 134**

#### Orchestra

Writing assignments, as appropriate to the discipline, are part of the course. Approved Repeatable Course: Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 4 times.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 0.5 LAB HOUR. 1 CREDIT HOUR.



## **MUSIC 135**

#### **Instrumental Ensembles**

String quartets, brass ensembles, jazz workshops, stage band. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable</u> <u>Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. <u>ARC: 4 times.</u>

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 0.5 LAB HOUR. 1 CREDIT HOUR.



## **MUSIC 136**

## Vocal Ensembles

Madrigal groups, trios, quartets, etc. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 4 times.** *Prerequisite(s): Consent of Department Chairperson/Coordinator.* 

1 LECTURE HOUR AND 0.5 LAB HOUR. 1 CREDIT HOUR.

## **MUSIC 150**

## Class Voice I

Group instruction in fundamentals of singing, voice production, breathing, diction, vocalizing, and technical exercises; elementary song literature as student progresses. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## MUSIC 151

## **Class Voice II**

Continued development of proper use of the voice; greater attention to literature; songs in English, Italian, German. Writing assignments, as appropriate to the discipline, are part of the course. Juried examination for credit.

Prerequisite(s): Grade of C or better in Music 150, or consent of Department Chairperson.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## **MUSIC 180**

## **Applied Music: Elective Level**

Individual instruction in applied music to prepare students for Music 181. Includes private lesson (minimum of one hour). Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Students must own (or have access to) the instrument they plan on studying. **1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.** 



## **MUSIC 181**

#### **Applied Music: Freshman Level I**

Individual instruction in applied music. Includes weekly private lesson (minimum of one hour). First of a four-course sequence of private music lessons required of students in Associate in music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MUSIC 182**

## Applied Music: Freshman Level II

Continuation of the process initiated in Music 181. Individual instruction in applied music. Includes weekly private lessons (minimum of one hour). Second of a four-course sequence of private music lessons required of students in Associate in Fine Arts Music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 181, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **MUSIC 200**

## **Black Music Workshop**

Contributions of African-American musicians to development of classical music, American style; study of work of contemporary artists, use of Afro-Cuban instruments. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



HD

#### MUSIC 201

#### **Music Theory III**

Written harmonization of melodies with strict style figuration. Eleventh and thirteenth chords, modal and chromatic alterations, chromatic modulation. Harmonic analysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 103, or consent of Department Chairperson.

## 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **MUSIC 202**

## **Music Theory IV**

Extended tonality, chromatic harmonies, contemporary harmonic trends, inharmonic modulation. Harmonic analysis. Keyboard application. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 201, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## MUSIC 204

## Commercial Music Workshop I

Composition, arrangement, and performance of commercial music. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator. 1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## MUSIC 205

#### **Commercial Music Workshop II**

Continuation of Music 204. Extended original composition; use of microphone and recording techniques; their influence upon orchestration. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 204, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### MUSIC 211 Aural and Keyboard Skills III

Continuation of Music 112. Further development of aural perception (melodic, rhythmic, and harmonic dictation) and abilities in sight-singing (single melodies and duets). Application of harmonic concepts at the keyboard. This course is the third in a four-semester sequence of courses in which music majors need to enroll each term of the freshman and sophomore year. The course may be offered separately or with one or more topics combined. Aural skills include sequential development of ear training, sight singing, and dictation and may also include computer-assisted instruction and/or other applications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 112, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MUSIC 212**

## Aural and Keyboard Skill IV

Continuation of Music 113. Further development of aural perception (melodic, rhythmic, and harmonic dictation) and abilities in sight-singing (single melodies and duets). Application of harmonic concepts at the keyboard. This course is the fourth in a four-semester sequence of courses in which music majors need to enroll each term of the freshman and sophomore year. The course may be offered separately or with one or more topics combined. Aural skills include sequential development of ear training, sight singing, and dictation, and may also include computer-assisted instruction and/or other applications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 113, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## MUSIC 225

## Individual Project

Individual project as determined with the instructor. Students would also be required to complete an internship as chosen through a discussion with the instructor. Eligibility for course repetition for additional credit hours determined by the instructor. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. <u>ARC: 1 time.</u>



#### **MUSIC 281**

#### Applied Music: Sophomore Level I

Individual instruction in applied music. Includes weekly private lesson (minimum of one hour). Third course in a four-course sequence of private music lessons required of students in Associate in Fine Arts music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 181, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **MUSIC 282**

#### Applied Music: Sophomore Level II

Individual instruction in applied music. Includes weekly private lesson (minimum of one hour). Last course in a four-course sequence of private music lessons required of students in Associate in Fine Arts music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Music 281, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **NETWORK TECHNOLOGIES**

## **NETWORKING TECHNOLOGIES 101**

### **Client-Server Database I**

In this course, students shall learn of the basics of client-server database commonly used in industry. The topics include: basic database terminology and concepts, conceptual modeling and Entity Relationship (ER) diagram, normalization, structure query language (SQL), and procedure language (PL/SQL). Prepares student for database administration course. Upon the completion of this course, students shall be equipped with basic skills of distributive network database. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

## 

#### **NETWORKING TECHNOLOGIES 111** Introduction to Computer Electronics

Introduction to concepts and principles used in modern computers and computer circuits; basic computer numbers systems; computer architecture; exposure to computer languages; digital logic. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 116, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **NETWORKING TECHNOLOGIES 119**

## Introduction to Networking

Covers the basics of networking from the component hardware to the topology and theoretical foundation of networks. Emphasis will be placed on learning current networking theoretical models and on supporting and maintaining a network. Various types of networks and various topologies will be covered. This course is ideal for the individual that wants to obtain a solid foundation in the principles of Networking. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 116, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## NETWORKING TECHNOLOGIES 121

## Internetworking I

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles of structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation in networking technologies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 101 or Computer Information Systems 116, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### NETWORKING TECHNOLOGIES 122 Internetworking II

This course describes the architecture, components, and operations of routers and switches in a small network . Students learn how to configure a router and a switch for basic functionality, and the essential routing protocols and virtual LAN operation in both IPv4 and IPv6 networks. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Networking Technologies 121 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### NETWORKING TECHNOLOGIES 201 Client-Server Database II

In this course, students shall learn of the how to manage a client-server databaseserve as database management administrator (DBA), learn techniques to create initial database, configure storage space, add/delete/modify users, and security issues for a database. Network configuration and performance tuning will be covered in more advance courses. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## NETWORKING TECHNOLOGIES 202 Client-Server Database III

In this course, students shall learn of the how to manage a client-server databaseserve as database management administrator (DBA), learn procedures necessary to recover a database failure, and ensure network accessibility for a client-server database. Student will learn both command-line and GUI interfaces to perform these procedures. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### NETWORKING TECHNOLOGIES 203 Client-Server Database IV

In this course, students will learn how to tune a client-server database and serve as database management administrator (DBA): learn tuning concepts, diagnose and prevent lock contention, discuss difference between dedicated and shared servers, prevent performance degradation as well as use tools to diagnose, troubleshoot and optimize database productivity. Writing assignments, as appropriate to the discipline, are part of the course.



## **NETWORKING TECHNOLOGIES 221**

#### Internetworking III

This course describes the architecture, components, and operation of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality, resolve common issues in both IPv4 and IPv6 networks, and implement a WLAN in a small-to-medium network. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Networking Technologies 122, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

## 

## **NETWORKING TECHNOLOGIES 222**

## Internetworking IV

This course discusses the WAN technologies and network services required by converged applications in a complex network. In a complex hierarchical network, students will learn the selection criteria of network devices and WAN technologies to meet network requirements, configure and troubleshoot network devices, resolve common issued with data link protocols, and develop the knowledge and skills needed to implement virtual private network (VPN) operations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Networking Technologies 221, or consent of Department Chairperson.

2 LECTURE AND 2 LAB HOURS. 3 CREDIT HOURS.

## 

## **NETWORKING TECHNOLOGIES 240**

## **Operating Systems/Server I**

This course introduces the concepts and components of a domain server to manage and serve the resources available in a network environment. The fundamentals of domain controller including domain are discussed with hands on learning experience. The processes of server installation, configuration, and maintenance will establish the necessary knowledge for planning and implementing advanced services. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 116, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

## 

## **NETWORKING TECHNOLOGIES 260**

## Microcomputers

Introduction to microcomputer architecture, peripheral and input/output devices. Testing, troubleshooting, upgrading and repair of microcomputer systems. Writing assignments, as appropriate to the discipline, are part of the course

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### NETWORKING TECHNOLOGIES 270 Local Area Networks

Selection and installation of network hardware and software. Management and maintenance of networks. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Courses may be repeated up to three times and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability.

Prerequisite(s): Grade of C or better in Computer Information Systems 116 or Networking Technologies 240, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **NETWORKING TECHNOLOGIES 299**

## **Special Topics Networking Systems Technologies**

Special topics in networking systems and technology will be discussed along with appropriate lab and/or field trip activities. New developments will be emphasized, especially materials useful in K12 education and industry. Writing assignments, as appropriate to the discipline re part of the course. **ARC: 4 times.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1-4 LECTURE HOURS. 1-4 CREDIT HOURS.



## NURSING

## NURSING 101

#### **Fundamentals of Nursing**

Introduction to the nursing process and practice; impact of illness and hospitalization affecting basic human needs regardless of age, sex or diagnosis; laboratory experience in hospitals and health agencies to acquire skill in application of nursing measures; student to demonstrate preparation for planned learning experience; all clinical laboratories under supervision of professional nurse faculty; clinical laboratory preceded and followed by group seminar. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into Program/Plan 239.

4 LECTURE HOURS AND 6 LAB HOURS. 7 CREDIT HOURS.



## NURSING 102

#### **Fundamentals of Nursing II**

Continuation of Nursing 101. Effects of illness and hospitalization on normal growth and development; laboratory experience to develop increased skills in basic nursing measures of care; all clinical laboratory experience supervised by professional nursing faculty, and preceded and followed by group seminar. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 101 and Biology 226.

4 LECTURE HOURS AND 6 LAB HOURS. 7 CREDIT HOURS.



## NURSING 140

## **Nursing Process and Documentation**

Introduction to nursing process and documentation. Nursing theories are briefly surveyed. Emphasis is placed on the development of critical thinking skills in the application of nursing process through exercises in care planning and nursing documentation. Students learn and utilize nursing diagnosis (NAN), nursing interventions classification (NIC), critical pathways, and other nursing documentation methods for these exercises. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **NURSING 150**

#### **Nursing Fundamentals I**

The concepts of holism, nursing practice, multicultural society and communication are studied for purposes of assisting persons to meet their basic needs. The role of the practical nurse in the use of the nursing process is studied and practiced in classroom, laboratory and long-term settings specifically in relation to protection against infection and providing for safety, mobility, comfort, hygiene, elimination and nutrition needs. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into Practical Nursing Program 240.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### NURSING 151

## **Nursing Fundamentals II**

Students learn to administer medications and to use the nursing process to care for persons having surgery. The nursing process is also used to assist persons with oxygen, wound care, fluid and electrolyte, and rest and sleep needs and to assist persons who need relief from pain. Learning in classroom, lab and clinical settings foster professional growth. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Admission into Practical Nursing Program 240, Grade of C or better in Nursing 150, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **NURSING 152**

## **Nursing Perspectives**

The course introduces students to the philosophy, conceptual framework, outcomes and competencies of the program. Nursing practice, nursing process and the therapeutic relationship are studied along with the ethical and legal aspects of nursing from the perspective of nursing practice in today's society. Contemporary healthcare delivery issues are also discussed. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into Practical Nursing Program 240.

2 LECTURE HOURS. 2 CREDIT HOURS.



## NURSING 153

## Nursing Thru Life Span I

Focusing on meeting the basic needs of families, preventive, supportive and therapeutic care is learned in class, lab and clinical settings. Students are expected to demonstrate professional growth and to function within the provisions of the Illinois Nursing Act of 2007. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 151 and Nursing 152 and Biology 226.

3 LECTURE HOURS AND 4 LAB HOURS. 5 CREDIT HOURS.



#### NURSING 154

## **Nursing Thru Life Span II**

Focus on the care of persons throughout the life span experiencing grief and death and the common disorders interfering with oxygenation, nutrition, elimination, hormonal balance, and protection from infection. Students integrate previous related learning and are expected to demonstrate professional growth and to function within the provisions of the Illinois Nursing Act of 2007. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 153 and Biology 227.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



## **NURSING 155**

## Nursing Thru Life Span III

This course focuses on the care of persons throughout the life span experiencing the most common disorders interfering with sexuality, mobility, and safety (including mental health disorders). Cancer is also studied because of its interferences with all basic needs. Students integrate previous related learning and are expected to demonstrate professional growth and to function within the provisions of the Illinois Nursing Act of 2007. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Nursing 154 and Biology 227.* 

2 LECTURE HOURS AND 8 LAB HOURS. 6 CREDIT HOURS.



#### NURSING 156 Nursing Fundamentals I Lecture

The concepts of holism, nursing practice, multicultural society and communication are studied for purposes of assisting persons to meet their basic needs. The role of the practical nurse in the use of the nursing process is studied and practiced in classroom, laboratory and long-term care settings specifically in relation to protection against infection and providing for safety, mobility, comfort, hygiene, elimination and nutrition needs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Nursing 157 or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## NURSING 157

## Nursing Fundamentals I Lab

The concepts of holism, nursing practice, multicultural society and communication are studied for purposes of assisting persons to meet their basic needs. The role of the practical nurse in the use of the nursing process is studied and practiced in classroom, laboratory and long term care settings specifically in relation to protection against infection and providing for safety, mobility, comfort, hygiene, elimination and nutrition needs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Nursing 156 or consent of Department Chairperson.

4 LAB HOURS. 2 CREDIT HOURS.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## **NURSING 203**

## **Nursing in Perspective**

Survey of the nursing career; responsibilities and changing role of a registered nurse. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 210 and Nursing 211.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **NURSING 210**

#### Nursing Process in Alterations in Homeostasis I

Care for the family in crisis. Application of concepts of growth and development, health maintenance and promotion. Emphasis on observational skills, interpersonal relationships; communications and psychodynamics of human behavior. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 102 and Biology 227 and Microbiology 233.

3 LECTURE HOURS AND 6 LAB HOURS. 6 CREDIT HOURS.



#### **NURSING 211**

## Nursing Process in Alterations in Homeostasis II

Continuation of the nursing process with focus on alteration in health status within the expanding family system. Physical, social and psychological assessments of patients. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 102 and Biology 227 and Microbiology 233. 3 LECTURE HOURS AND 6 LAB HOURS. 6 CREDIT HOURS.



#### NURSING 212

#### Nursing Process in Alterations in Homeostasis III

Continuation and implementation of the nursing process in the care of patients within the family unit. Consideration given to various stages of growth and development across the life cycle where patients and family are adapting to stressors. Use of a variety of learning experiences for initiating and implementing change in nursing approaches to client care. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Nursing 210 and Nursing 211.* 

3 LECTURE HOURS AND 6 LAB HOURS. 6 CREDIT HOURS.



#### **NURSING 213**

## Nursing Process in Alterations in Homeostasis IV

Terminal integrating experiences utilizing the nursing process to meet the needs of patients and families in complex healthcare situations. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Nursing 210 and 211.

3 LECTURE HOURS AND 6 LAB HOURS. 6 CREDIT HOURS.



## NURSING 250

## Health Assessment

This course offers an introduction to health assessment through the application of holistic nursing theory and nursing process to clinical nursing practice. The nursing process and the role of the nurse are examined in relation to the health assessment of individuals acoss their lifespan. Emphasis is placed on modes of investigation and inquiry in gathering data concerning physiological, psychosocial, cultural, and spiritual aspects of human experiences. Legal and ethical considerations related to the nurses role in health assessment are explored. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Nursing 101, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## NURSING 299

## **Special Topics Nursing**

Special topics in nursing will be presented along with appropriate lab and/ or clinical activities. New developments will be emphasized, related to National League of Nursing Accreditation Commission and changes in Illinois Department of Professional Regulations rules, as well as best practices issues. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 4 times.** 

Prerequisite(s): Admission to the Nursing Program/Plan and as determined by topic.

0-3 LECTURE HOURS AND 2-8 LAB HOURS. 1-8 CREDIT HOURS.



## **OCCUPATIONAL THERAPY ASSISTANT**

## OCCUPATIONAL THERAPY ASSISTANT 106 Foundations of Human Occupation

This course explores the meaning of human occupation and its relationships to health, illness and disability. The historical roots of occupational therapy are explored and linked to the roles of contemporary occupational therapy practitioners. Students will experience a variety of learning strategies and activities as a means to gaining understanding of occupation, the occupational therapy process and the skills needed by a healthcare professional. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101 placement level.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## OCCUPATIONAL THERAPY ASSISTANT 107 Occupations of Childhood

The first in a sequence of courses addressing the emergence of occupational behaviors, skills and life roles in humans throughout the life span. This course presents occupational and developmental frameworks for understanding the occupational nature of infants and children through 12 years of age, their families and caregivers. Means of applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions and circumstances affecting this period of human development. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.



## **OCCUPATIONAL THERAPY ASSISTANT 108**

Practice Skills of OT Assistant I

Structured experiential learning will provide opportunities for students to solidify knowledge, develop and practice professional skills and behaviors utilized in the occupational therapy process with infants, children through twelve years of age and their families in a variety of settings. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1 LECTURE HOUR AND 2 LAB HOURS, 2 CREDIT HOURS,



#### OCCUPATIONAL THERAPY ASSISTANT 109 Occupations of Adolescence Early Adulthood

The second in a sequence of courses addressing the emergence of occupational behaviors, skills and life roles in humans throughout the life span. This course presents theoretical frameworks and models for understanding the occupational nature of adolescents and young adults at home, at school and in the community. Approaches to applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions and circumstances affecting this period of human development. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



#### OCCUPATIONAL THERAPY ASSISTANT 110 Practice Skills of OT Assistant II

Structured experiential learning will provide opportunities for students to solidify knowledge develop and practice professional skills and behaviors utilized in the occupational therapy process in a variety of settings with adolescents and young adults. Writing assignments, as appropriate to the discipline, are part of the course. **1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.** 



## OCCUPATIONAL THERAPY ASSISTANT 209 Occupation of Middle Adulthood

The third in a sequence of courses addressing the emergence of occupational behaviors, skills and life roles in humans throughout the life span. This course presents theoretical frameworks and models for understanding the occupational nature of the middle adulthood years in home settings, work environments, and in multiple levels of community. Approaches to applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions and circumstances affecting this period of human development. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



## OCCUPATIONAL THERAPY ASSISTANT 210 Practice Skills of OT Assistant III

Structured experiential learning will provide opportunities for students to solidify knowledge, develop and practice professional skills and behaviors utilized in the occupational therapy process in a variety of settings with middle-aged adults. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

#### OCCUPATIONAL THERAPY ASSISTANT 211 Special Topics for Occupational Therapy I

The first of a two course sequence designed to develop knowledge and skills needed for the provision of occupational therapy services to special populations. Students will explore the role of the occupational therapy assistant in a variety of service delivery contexts. A variety of strategies used to engage in collaborative occupational therapy supervisory relationships in settings without occupational therapists will be addressed. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## OCCUPATIONAL THERAPY ASSISTANT 212 Occupations of Later Adulthood

The fourth in a sequence of courses addressing the emergence of occupational behaviors, skills and life roles in humans throughout the life span. This course presents theoretical frameworks and models for understanding the occupational nature of later adulthood in multiple living settings, work-related environments, and in community. Approaches to applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions and circumstances occurring during this period of human development. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS AND 2 LAB HOURS. 5 CREDIT HOURS.



#### OCCUPATIONAL THERAPY ASSISTANT 213 Practice Skills of OT Assistant IV

Structured experiential learning will provide opportunities for students to solidify knowledge, develop and practice professional skills and behaviors utilized in the occupational therapy process in a variety of settings with elders. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## OCCUPATIONAL THERAPY ASSISTANT 214 Special Topics for OTA II

The second of a two course sequence designed to develop knowledge and skills needed for the provision of occupational therapy services to special populations. Students will explore the role of the occupational therapy assistant in a variety of service delivery contexts. A variety of strategies used to engage in collaborative occupational therapy supervisory relationships in settings without occupational therapists will be addressed. A special populations independent study incorporating fundamentals of entrepreneurship and marketing is included. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## OCCUPATIONAL THERAPY ASSISTANT 215 Fieldwork Level II

Students will apply and synthesize the knowledge base skills and attitudes of an occupational therapy assistant in a supervised healthcare fieldwork experience. Fieldwork placements in a community settings or institutions will afford students opportunities to engage in occupation-based practice with individuals across the lifespan and who may experience a variety of disorders and conditions. The course includes a campus-based student seminar to support the process of professional skills acquisition. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



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## **OCCUPATIONAL THERAPY ASSISTANT 216**

## Fieldwork Level B

Students will apply and synthesize the knowledge base, skills and attitudes of an occupational therapy assistant in a supervised healthcare fieldwork experience. Fieldwork placements in community settings or institutions will afford students opportunities to engage in occupation-based practice with individuals across the lifespan and who may experience a variety of disorders and conditions. The course includes a campus-based student seminar to support the process of professional skills acquisition. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY**

## **OPHTHALMIC TECHNOLOGY 112**

## Anatomy and Physiology of the Eye

Structure and function in the human visual systems are covered. Anatomy and physiology of the eyeball, orbit and ocular adnexa, related to pharmacology and pathology are explored in detail. Laboratory and literature assignments, as appropriate to the visual pathway are part of the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 114**

#### **Ophthalmic Optics**

Basic optical principles of lenses and the human eye from both theoretical and practical standpoints are discussed. The course involves study of the physical properties of light and how refractive materials relate to the human visual system in the ophthalmic profession. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 120**

## **Ophthalmic Pre-Testing**

This course prepares students to perform duties of a technical nature relating to the assisting of a licensed practitioner in a dependent clinical relationship. These duties include case history, visual acuity measurement, pupillary evaluation, color vision testing, depth perception, and blood pressure measurement. The care, calibration and maintenance of the instrumentation used to perform the appropriate testing are included in the course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 112, and Ophthalmic Technology 114, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## OPHTHALMIC TECHNOLOGY 125

## Retinoscopy and Refractometry

Principles and techniques of refractometry and retinoscopy with emphasis on skill development using schematic eye are covered. Students will be presented with theoretical principles behind and ophthalmic correction, as well as have the opportunity to learn various techniques of retinoscopy and refractometry, with both manual and automated equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 120, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### OPHTHALMIC TECHNOLOGY 130 Ophthalmic Dispensing

An introduction to the basic principles of frame selection, materials, parts, adjustment, repair, and facial measurement appropriate to the dispensing of single vision and multi-focal eyewear. This course also assists students in the alignment of frames for dispensing, as well as spectacle lens insertion and removal. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 112 and 114, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **OPHTHALMIC TECHNOLOGY 141** Ophthalmic Office Procedures

This course introduces students to their personal and vocational responsibilities as an ophthalmic technician. Office procedures as applied to ophthalmic, including telephone etiquettes, appointment systems, bookkeeping, payroll record, thirdparty billing and authorization, recalls, computers, and other business management methods. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. 4 LECTURE HOURS, 4 CREDIT HOURS,

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#### **OPHTHALMIC TECHNOLOGY 150** Ocular Pharmacology

Actions and uses of diagnostic and therapeutic pharmaceutical agents, and their function based on interference with normal ocular physiology will be covered. The principles of drop delivery techniques and the effect of the delivery system, as well as allergic reactions are also discussed. The actions, indications and side effects of common drugs will be included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 160**

### First Aid, Emergency Care, CPR

This course trains responders to act appropriately in emergency situations and to recognize and care for life-threatening respiratory or cardiac emergencies. Lecture and demonstration on first-aid protocol to address wounds, hemorrhage, burns, exposures, sprains, dislocations, fractures, unconscious conditions, suffocation, drowning, and poisoning are covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.



## **OPHTHALMIC TECHNOLOGY 221**

## **Ophthalmic Ancillary Testing**

Principles and techniques of specialty visual system examinations are presented. The visual pathway, common causes of visual field loss and related subjects will be covered with emphasis on visual field testing, scanning laser polarimetry, optical coherence tomography, and other technology based testing procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 120, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 223**

## Advanced Ophthalmic Assisting

Principles and techniques of keratometry, pachmetry, exophthalmometry, applanation tonometry, ultrasound, advanced ocular motility, minor surgical procedures, and scribing are covered with an emphasis on skill development in these areas. This course prepares the technician to assist the doctor in advanced office techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 230**

## **Clinical Practicum I**

Assigned clinical experience is designed to provide detailed education and training, while applying the technical skills acquired in previous course work. The student is expected to achieve specific educational objectives determined for this experience. Recording of clinical data, patient handling, optical dispensing, and preliminary examination techniques are stressed. Clinical conferences are included. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 112, 120, and 130, or consent of Department Chairperson.

9 LAB HOURS. 3 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 235**

## **Contact Lenses**

This course provides an introduction to contact lens theory, and practice, related to contact lens types, materials, patient care instructions, insertion and removal techniques, and fitting parameters. Procedures for ordering, verifying and modifying contact lenses are also included, with an emphasis on patient instruction, education and advancements in contact lens technology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 112 and 114, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 240**

## Integrated Science for Ophthalmic Technicians

Students are exposed to pathology of the eye and related structures, integrated with the symptomology and treatment of these conditions. Systemic conditions with ocular manifestations are also presented. Basic clinical microbiology and practical microbiology as they relate to the diagnosis, treatment and management of ophthalmic diseases are also included. Medical/insurance coding procedures and insurance in ophthalmology are introduced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 112 and 130, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### OPHTHALMIC TECHNOLOGY 242 Clinical Practicum II

This course provides for the use of skills acquired in secondary course work to perform contact lens instruction, minor surgery assistance, refractometry, retinoscopy, advanced motility testing, scanning laser polarimetry, optical coherence tomography and advanced visual field testing. Clinical conferences are scheduled. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 141 and 230, or consent of Department Chairperson.

9 LAB HOURS. 3 CREDIT HOURS.

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## **OPHTHALMIC TECHNOLOGY 243**

**Advanced Ophthalmic Procedures** 

The technician is taught to assist in the management of pre-operative and postoperative patients, with a review of the related pharmaceuticals, or advanced ophthalmic procedures are included, such as laser assistance, ultrasound, potential acuity meter, and endothelial cell counts. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 223, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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## **OPHTHALMIC TECHNOLOGY 244**

Advanced Ophthalmic Techniques

Principles and techniques of advanced ophthalmic procedures such as fundus photography, fluorescein angiography, ophthalmometry, and care of the refractive surgery patients including advanced refractometry and retinoscopy are discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Ophthalmic Technology 112, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **OPHTHALMIC TECHNOLOGY 260**

## Introduction to Surgical Technology

Technology principles and procedure used in set up and preoperative care of the patients, assisting the surgeon during the procedure, monitoring patients during the surgery, and assisting the patients through the recovery and post-operative period. Pharmaceuticals as appropriate to this discipline are reviewed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson.

1 LECTURE HOUR. 1 CREDIT HOUR.



## **OPHTHALMIC TECHNOLOGY 290**

## **Electronic Medical Record**

Electronic business management and electronic medical record systems are introduced. The ethical implications and responsibilities of technicians in relation to record keeping are review in detail. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## PAINTING AND DECORATING TECHNOLOGY

## **PAINTING AND DECORATING TECHNOLOGY 775**

#### Introduction to Safety in the Trades

This course, required by the Occupational Health and Safety Act (OSHA), applies toward the 10-hour and 30-hour Construction Industry course completion cards. The course covers topics pertaining to regulations covered by Standard 29 CFR 1926. The successful completion of this course will help meet the Construction Industry standards established by OSHA. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### PAINTING AND DECORATING TECHNOLOGY 776 Environmental Safety for the Trades

This is an applied environmental science course designed to provide students with an understanding of the basic scientific concepts and methods they need to understand environmental conditions that affect workplace safety for workers within all trade areas. This course will show students how to observe and evaluate environmental conditions in the workplace in order to ensure the work environment is safe. Students will also gain useful exposure and knowledge to basic safety practices including but not limited to First Aid/CPR, First Aid/AED (Automated External Defibrillator), Respiratory Protection, Fall Protection and safety protocol when using power tools. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PAINTING AND DECORATING TECHNOLOGY 777

## **Blueprints, Codes and Specifications**

Upon successful completion of this course, students will be able to locate and identify engineered specifications within a set of plans; locate and identify engineered scaled and unscaled drawings; order and manage construction materials from a set of plans; increase creditability and communication between the job foreman and job-site engineers; identify National Building Codes pertaining to their trade. Available to students through partnerships with Department of Labor approved apprenticeship programs. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 778 Labor History: Past and Present

This course is a comprehensive course covering the history of unions through to the current economic, social and political environment that a laborer enters into today. All members of the trades who participate in this course will learn the reasons for unionization, how unions promote the trade and serve the members, and their union's structure and activities. Many of the lessons incorporate role-plays, discussions and interviewing and investigation tasks that will help the participants to not only learn the subject matter but also be able to develop speaking, writing, thinking and problem-solving skills useful on the job. Additionally, special emphasis will be placed on the history of the IUPAT from its inception in 1887 to the present. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 779 Advanced Safety in the Trades

This applied health and environmental sciences course is designed to provide students with an overview of the anatomy and physiology of the human body, as well as basic concepts of chemistry, electricity, and radiation, and their application in the evaluation of hazardous environments, so that they are able to recognize, evaluate, prevent, and abate safety and health hazards associated with workers on a construction site. Potential hazards and related safety procedures pertaining to loud noises, hazardous materials (including both chemical and radiation hazards), power tools, electricity, and forklifts are discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 775 and Painting and Decorating Technology 776.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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## PAINTING AND DECORATING TECHNOLOGY 780 Introduction to Painting

This class will orient individuals to the painting profession. Topics to be covered include painting materials, tools, equipment and terminology. An overview of the characteristics of light and color will also be provided. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 781 Introduction to Wallcovering

This course covers the history and basic principles of wall covering. Students will learn how to prepare a surface for wall covering and how to apply wall covering. Tools and materials of the wall covering trade will also be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PAINTING AND DECORATING TECHNOLOGY 782 Techniques of Spray Painting

This course covers the fundamentals of spray painting with a detailed discussion of the most common spray painting systems: electrostatic, turbine, airless, conventional, air, HVLP, and turbine. Students also learn the potential hazards involved with spray equipment and how to use spray equipment safely. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PAINTING AND DECORATING TECHNOLOGY 783

**Techniques of Wallcoverings** 

This course covers the advanced techniques of wall covering. Specialized decorative techniques such as glazing, antiquing, wood graining, marbleizing, texturing, gilding, stenciling, and stipple finishing will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### PAINTING AND DECORATING TECHNOLOGY 784 Introduction to Drywall

This course is designed to provide an introduction to the drywall industry and the tools of the trade. Students will learn the fundamentals of the drywall industry, the history and scope of the trade, the rules and regulations of the Joint Apprenticeship Training Committees and the role of the apprentice, past and present. This introductory course will also help tradesmen not only to identify and select the proper tools for producing an efficient and artistic finish to a job, but also help them learn proper handling of the tools to reduce personal strain to the body. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 778.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 785 Materials of the Drywall Trade

This course is designed to provide a working knowledge of filling compounds and the various materials used in the construction of drywall. Students will also learn the proper procedure for pre-inspecting a job site to ensure that lighting, pre-filling, personal protective equipment and all tools, equipment and materials are available and properly prepared for use on a job.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 784.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 786 Taping and Filling Techniques

Taping is the process of gluing or adhering paper or fiberglass tape over wallboard joints to reinforce the joints and provide a smooth surface for applying further coats of filler. In this course, participants will demonstrate the taping process using the dry taping method, hopper tape and banjo tape method. This course will also focus on further techniques for applying tape and filling various surfaces during first, second and third coatings. Students will learn the trowel and broad knife methods of filling by hand and will be able to choose the proper method for filling surfaces such as rounded surfaces, ceilings, walls, angles, joints and beads. Participants will also learn to recognize the proper application of tape and be able to troubleshoot problems with tape that did not adhere or wipe properly. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 785.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 787 Automatic Taping Tools Strategies

Automatic Taping Tools are the most commonly used methods of taping in the Drywall industry. Students will gain hands on experience while learning the parts, functions, safety, and maintenance procedures for using automatic taping tools. These experiences will also include the operation of the loading pump, loading procedures, proper holding techniques and the taping sequence. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 786.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### PAINTING AND DECORATING TECHNOLOGY 788 Introduction to Industrial Painting

This course covers quality control and quality assurance. Students will learn how to recognize failures of paint coatings, causes of failures and their remedies. Students will also learn to conduct a quality control inspection and the standards that apply to the various tasks performed during the inspection process. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PAINTING AND DECORATING TECHNOLOGY 789 Surface Preparation

This course covers the tools, materials and methods used for cleaning and preparing surfaces using solvents, hand tools and power tools. Content in this course is based on the methods and procedures specified by SSPC and NACE. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### PAINTING AND DECORATING TECHNOLOGY 790 Materials for Industrial Painting

#### Materials for industrial Painting

This course covers the basic components and film-forming processes of paints and coatings. The different systems and functions of paints and coatings are described. The criteria for selecting a coating system based on surface environment and preparation requirements are outlined. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 788.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PAINTING AND DECORATING TECHNOLOGY 791 Techniques of Industrial Spraying

This course covers the fundamentals of spray painting with a detailed discussion of the most common spray painting systems: electrostatic, turbine, airless, conventional, air, HVLP, and turbine. Students also learn the potential hazards involved with spray equipment and how to use spray equipment safely. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 788.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PAINTING AND DECORATING TECHNOLOGY 792

## Safety for Industrial Painting

This course covers the dangers related to working with lead and the procedures for safe exposure and abatement. In particular, this course will cover what lead is, where it can be found, its health effects, its hazards, worker and community rights related to lead, abatement methods, clean-up, disposal, and laws, regulations, and standards. This course also covers the potential hazards of working with toxic and flammable materials and the related use of personal protective equipment. Additionally, the course covers the potential hazards related to working on raised or unstable platforms. The types of tools and equipment for elevating oneself and one's work materials are identified. Selection, inspection, setup, safe techniques and proper maintenance of equipment are discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 788. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### **PAINTING AND DECORATING TECHNOLOGY 793 Testing and Quality Control**

This course covers quality control and quality assurance. Students will learn how to recognize failures of paint coatings, causes of failures and their remedies. Students will also learn to conduct a quality control inspection and the standards that apply to the various tasks performed during the inspection process. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Painting and Decorating Technology 788. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### **PAINTING AND DECORATING TECHNOLOGY 794 Techniques of Painting**

This course covers surface preparation, selection and characteristics of materials, and standards and specifications related to abrasive blasting, H20 blasting, and painting. Special emphasis will be placed on characteristics of normal and abnormal surface deterioration and thermal spraying for metal substrates. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



## PHARMACOLOGY

## PHARMACOLOGY 103 **Pharmacology for Nurses**

Weights and measures in pharmacy, drug standards and techniques and skills for safe and accurate preparation of oral and hypodermic doses of drugs. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PHARMACOLOGY 104

## **Pharmacodynamics Nursing Care**

This course offers an introduction to pharmacodynamics through the application of holistic nursing theory and nursing process to clinical nursing practice. General principles of drug action are discussed as they relate to the nursing care of patients of all age groups. The uses and modes of action for various classifications of medications will be presented. Principles from the basic sciences to include a holistic nursing perspective will be reinforced. Emphasis is placed on the nursing role in medication administration and evaluation of patient response to medications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Biology 226 and Biology 227, or consent of Department Chairperson.

## **3 LECTURE HOURS. 3 CREDIT HOURS.**

## PHARMACY TECHNOLOGY

#### **PHARMACY TECHNOLOGY 100 Intravenous Preparation**

This course provides basic understanding and training of intravenous preparations of sterile products, clothing, equipment, calculations and documentation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Current Licensed and Certified Pharmacy Technician. 2 LECTURE HOURS AND 4 LAB HOURS, 4 CREDIT HOURS,



## **PHARMACY TECHNOLOGY 101**

## **Pharmacology Allied Health**

Principles and characteristics of drugs, including physical and chemical properties, dosage calculations, effects and reactions, toxicity, emergency procedures and methods of administration. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Pharmacy Technology Program/Plan 254.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.

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## **PHARMACY TECHNOLOGY 102**

## **Basic Science for Allied Health Personnel**

Fundamental biological and biochemical principles as applied to allied health personnel. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Pharmacy Technology Program/Plan 254.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **PHARMACY TECHNOLOGY 103**

Introduction to Pharmacy Technology

This course introduces students to the field of pharmacy technology. Included is an overview of the Pharmacy Technician certificate program, definition of the pharmacy technician's role, and a review of opportunities open to the pharmacy technician. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Pharmacy Technology Program/Plan 254. 2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



**INFORMATION SUBJECT TO CHANGE** 

## PHARMACY TECHNOLOGY 104

## **Pharmaceutical Calculations**

Designed to provide mathematical tools for students enrolled in the pharmacy technology program. Emphasis is on practical aspects of mathematics and less upon the theoretical. Topics include, but are not limited to: fundamentals of measurement and calculation; interpretation of prescription or medication order; the metric system; calculation of doses; reducing and enlarging formulas; and percentage and ratio calculation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Pharmacy Technology Program/Plan.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PHARMACY TECHNOLOGY 105

Prescription Compounding

This course provides a basic understanding and training of compound preparations of products, equipment, calculations and documentation. Writing and reading assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Current Licensed and Certified Pharmacy Technician.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## PHARMACY TECHNOLOGY 113

## Prescription Processing

Provides basic understanding of the person/pharmacy computer prescription processing software and the development of keyboarding skills. Learn to produce all requisite documentation for the pharmacy. Writing assignments, as appropriate to the discipline, and part of the course.

Prerequisite(s): Admission to the Pharmacy Technology Program/Plan 254.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PHARMACY TECHNOLOGY 121

## **Pharmacy Communication**

Provides basic communication skills and pharmacy practice including verbal, nonverbal communication. Communication barriers, listening/empathic responding, assertiveness, interviewing assessment, patient outcomes, communications with special patients/children about medications are explored in this profession. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **PHARMACY TECHNOLOGY 201**

## Introduction to Pharmacy Law

Overview of legal aspects of the pharmacy practice, including a review of the Federal Controlled Substances Act and Illinois statues, rules and regulations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Pharmacy Technology Program/Plan 254.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### PHARMACY TECHNOLOGY 202 Pharmacy Operations

Fundamentals and specifics of drug distribution in hospital and retail pharmacies, including bulk compounding, packaging, quality control, inventory control, drug storage and a variety of drug delivery systems. Mathematical calculations for basic pharmacy operations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Pharmacy Technology Program/Plan 254. 3 LECTURE HOURS AND 2 LAB HOURS, 4 CREDIT HOURS.

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#### PHARMACY TECHNOLOGY 204 Clinical Practicum I

This course is designed to provide employment skills as a concurrent and integral part of a student's educational program in pharmacy technology. Supervised work experience in ambulatory care pharmacy practice is provided by applying the knowledge and training learned in related pharmacy technology courses. Training also involves progression from role of observer to assistant, then to relative independence under the direct supervision of a registered pharmacist and clinical coordinator. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Pharmacy Technology 103 and Pharmacology 103. 2 LECTURE HOURS AND 10 LAB HOURS. 4 CREDIT HOURS.



#### PHARMACY TECHNOLOGY 205 Clinical Practicum II

This course is designed to provide employment skills as a concurrent and integral part of a student's educational program in pharmacy technology. Supervised work experience in ambulatory care pharmacy practice is provided by applying the knowledge and training learned in related pharmacy technology courses. Training also involves progression from role of observer to assistant, then to relative independence under the direct supervision of a registered pharmacist and clinical coordinator. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Pharmacy Technology 101, 102, 201, and 202, and Pharmacology 103. 2 LECTURE HOURS AND 10 LAB HOURS. 4 CREDIT HOURS.

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## ΡΗΙ ΤΗΕΤΑ ΚΑΡΡΑ

#### **PHI THETA KAPPA 101**

## Phi Theta Kappa Leadership Development

Development of leadership abilities through the study of classic examples in The Great Books and through experiential exercises. Includes topics on leadership and group dynamics, moral and ethical responsibilities of leadership, delegation of authority. Conflict resolution, essential leadership skills, and productive leadership behavior. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## PHILOSOPHY

## **PHILOSOPHY 110**

## Social/Political Philosophy

Discussion of readings in philosophy covering issues such as justice, authority, obligation, rights, power, freedom and well-being. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



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## PHILOSOPHY 151

## **Bioethics**

This course will prepare students to develop and apply explicit, coherent reasoning and judgment to important issues in the ethics of healthcare and to address the philosophical issues of human personhood, life, death, and suffering. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## PHLEBOTOMY

## PHLEBOTOMY 109

## **Phlebotomy Practicum and Seminar I**

This course provides principles of phlebotomy techniques and examines the phlebotomist's role as a member of the healthcare delivery team. The students will perform simulated phlebotomy procedures on campus and actual procedures in a clinical setting. Medical terminology, anatomy and physiology, communications, interpersonal relations, professional behavior, safety requirements in the healthcare institution, venipuncture and capillary puncture techniques will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 9 LAB HOURS. 5 CREDIT HOURS.



#### **PHLEBOTOMY 209**

#### **Phlebotomy Practicum and Seminar II**

This course provides students with 200 hours of hands-on experience in both intravenous and capillary blood drawing in a clinical setting, plus 40 lectures on campus in phlebotomy related theory. The student will be expected to perform a minimum of 135 successful unsupervised venipuncture using standard equipment, as well as syringe and butterfly apparatus. Topics such as: stress management, legal aspects, quality control and quality assurance, data entry and basic computer skills, cardio-pulmonary resuscitation (CPR), continuation of medical terminology will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS AND 15 LAB HOURS. 6 CREDIT HOURS.** 



## PHYSICAL EDUCATION

#### PHYSICAL EDUCATION 110 Fitness

Concepts, techniques, methods of personal fitness, stressing effects of exercise, relaxation and weight control; fitness programs directed to individual improvement. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



#### PHYSICAL EDUCATION 112-1 Gymnastics and Tumbling

General calisthenics and fundamentals of combinations of simple tumbling, gymnastics, stunts and/or modern gymnastics and practice; competitive aspects and scoring. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



#### **PHYSICAL EDUCATION 114**

## Jogging

Running techniques to improve organic fitness through individualized programs. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



#### **PHYSICAL EDUCATION 116**

#### Self-Defense and Combatives

Elements of self-defense; understanding of combatives; conditioning, offensive and defensive tactics, rules and strategy for competition. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 118**

## Weight Training

Development of physical fitness through weight training devices; lifting techniques, circuit training, competitive lifting procedures. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 1-2 times.** 



## **PHYSICAL EDUCATION 120**

## **Team Sports**

Combination of one or more seasonal sports such as basketball, floor hockey, soccer, softball, touch football and volleyball; theory and practice of fundamental skills, rules of the game and strategy; competition and tournaments within classes. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 122-1**

## **Individual Sports**

One or more lifetime sports such as archery, badminton, bowling, fencing, golf, skating, skiing, tennis, and track and field; theory and practice of individual skills, rules of the game, techniques of game strategy; competitive tournaments within class. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 130**

## **Fundamentals of Swimming**

For beginning and intermediate swimmers; breathing techniques, basic strokes, diving and water safety skills. American Red Cross card issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. <u>ARC: 2 times.</u>

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 132**

#### **Advanced Swim and Water Games**

Instruction in all strokes to improve efficiency and speed; diving from pool side, springboard, rescue skills and surface dives; preparation for lifesaving course; individual and team competition in such games as water basketball and water polo. American Red Cross Card issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 134**

## **Aquatic Skills and Synchronized Swimming**

Development of skills for participation in synchronized swimming activities; stunts and combinations of strokes for simple rhythmic routine composition; advanced diving and underwater skills. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. <u>ARC: 2 times.</u> 0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## PHYSICAL EDUCATION 140

## Dance Survey

Introduction to dance techniques such as square, folk, tap, contemporary, social and ballet. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 142**

## Square and Folk Dance

Fundamentals and practice in basic steps and figures of American and foreign folk dance. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.

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## **PHYSICAL EDUCATION 144**

## Ethnic Dance

Rhythms, dance and cultures of Africa and their interrelationships with Latin American dance and calypso movements. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## PHYSICAL EDUCATION 146

Contemporary Dance I

Contemporary dance including warm-ups, technique, dance patterns, analysis of rhythm and creative experience in improvisations and simple movement studies. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 148**

## Contemporary Dance II

Advanced technique, training and principles of movement perception, introduction to fundamentals of dance composition with emphasis on design, form and production. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable Course:</u> Not more than an accumulated four credit hours will be counted towards graduation. <u>ARC: 2 times.</u>

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 150**

## Ballet

Form, style and performance of basic ballet movements and practice of beginning dances; fundamentals of music related to dance. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 



## **PHYSICAL EDUCATION 152**

#### Тар

Techniques of tap dance; practice and experience in creating simple routines. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 160**

Adaptive Physical Education

For students restricted by health limitations; activity programs to meet specific needs of the individual. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated four credit hours will be counted towards graduation. **ARC: 2 times.** 

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 200**

## Introduction to Physical Education

History and objectives of physical education; opportunities in physical education, health and recreation; off-campus observations. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.

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## **PHYSICAL EDUCATION 201**

#### **Dance Fundamentals**

Rhythm as related to movement and dance; skill practice with emphasis on correct performance, interpretation of dance patterns, opportunities for student teaching. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

## КК

## **PHYSICAL EDUCATION 202**

#### Ballet

Principles of classical ballet, terminology and methods of teaching elementary composition. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## **PHYSICAL EDUCATION 203**

## **Contemporary and Modern Jazz Dance**

Analysis through movement, exploration of dance forms, their similarities and differences; skill practice and teaching experience in each area. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## **PHYSICAL EDUCATION 204**

## Wrestling

Analysis, instruction and theories of coaching, officiating and match strategy. Writing assignments, as appropriate to the discipline, are part of the course. 0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



#### PHYSICAL EDUCATION 206 Football

Analysis, instruction, demonstration of fundamental skills; theory of coaching and officiating, styles of play and team strategy. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## **PHYSICAL EDUCATION 207**

## Introduction to Personal Training

This course is designed to prepare students to sit for the personal trainer's exam. The course bridges the gap between exercise science related course work and the practical application skills of personal training. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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## **PHYSICAL EDUCATION 212**

## Volleyball

Instruction, demonstration and practice of skills; coaching and officiating, styles of play and team strategy. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## **PHYSICAL EDUCATION 216**

#### Track

Skills and teaching techniques of track and field events; rules of competition, strategy and team organization of the sport. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## PHYSICAL EDUCATION 218 Basketball

Fundamentals of basketball and techniques of team organization; skills of each position, offensive and defensive skills, team play, strategy and officiating. Writing assignments, as appropriate to the discipline, are part of the course.

0.5-1 LECTURE HOUR AND 1-2 LAB HOURS. 1-2 CREDIT HOURS.



## **PHYSICAL EDUCATION 219**

## Sports Officiating

Rules and mechanics of officiating of various team and individual sports; responsibilities and qualifications of an official. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICAL EDUCATION 221**

Play and Rhythmic Activities of Early Childhood

Methods and materials for teaching simple rhythmic games, singing games and other movement experiences for pre-school child; analysis of play situations appropriate to their needs and abilities. Writing assignments, as appropriate to the discipline, are part of the course.





#### **PHYSICAL EDUCATION 224**

#### **Tumbling and Gymnastics**

Instruction and practice in teaching fundamental exercises; correct execution, development of skills, methods of giving gymnastic commands, tumbling and pyramid building; instruction and theories of coaching, officiating and competitive needs. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## PHYSICAL EDUCATION 226

#### Swim and Senior Life Saving

Skills of fundamental strokes to improve efficiency and speed; diving from pool side and springboard, rescue skills and surface dives; introduction to coaching of competitive swimming; safety, accident prevention; defense methods, rescue techniques. American Red Cross card issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICAL EDUCATION 229**

#### Water Safety Instructor

Swimming skills and techniques in all strokes, skills and techniques of life saving, water safety; practice in class management and teaching progressions; requirements meet those of American Red Cross Water Safety Instructors training program; American Red Cross Water Safety Instructors certificate issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICAL EDUCATION 230**

#### **Baseball and Softball**

Basic skills, coaching and officiating styles of play, teaching techniques and team strategy. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICAL EDUCATION 234**

#### Soccer

History, basic skills, playing tactics, officiating and teaching methods. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## **PHYSICAL EDUCATION 236**

### **Fitness Programs**

Individual physical development; methods and teaching techniques of various fitness programs; introduction to physiology of exercise. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICAL EDUCATION 237**

## **Body Mechanics**

Principles of fitness, including exercise, nutrition, diet, self-analysis, relaxation, posture, movement and sport activity analysis. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICAL EDUCATION 244**

## Tennis

Basic skills, strategy and playing techniques and teaching methods of tennis; rules, history and court etiquette. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.



## **PHYSICAL EDUCATION 246**

Golf

Basic practices and teaching of grip, stance and swing; rules, strategy, course layout, etiquette. Writing assignments, as appropriate to the discipline, are part of the course.

0.5 LECTURE HOUR AND 1 LAB HOUR. 1 CREDIT HOUR.

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## **PHYSICAL SCIENCE**

## PHYSICAL SCIENCE 201 Fundamentals of Vector GIS

Fundamentals and application of vector GIS, using Arc-GIS. This class will focus on modeling and analyzing spatial problems in many economic sectors and environmental fields in which spatial data can be represented by points, lines and planes. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101, and completion of Mathematics 99 or equivalent placement test, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## PHYSICAL SCIENCE 202

## **Raster GIS and Remote Sensing**

Fundamentals and application of raster GIS, using Arc-GIS. This class will focus on modeling and analyzing spatial problems in many economic sectors and environmental fields in which spatial data can be represented by an arrangements of pixels in a matrix such as digital elevation models and imagery. Writing, assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101 and completion of Mathematics 99 or equivalent placement test or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **PHYSICAL SCIENCE 295**

#### **Independent Research in Physical Science**

This course emphasizes independent, student-driven research under the close supervision of a faculty member. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Eligibility for course repetition for additional credit hours is determined by the instructor. No more than an accumulated 12 credit hours will be counted towards graduation.

Prerequisite(s): Eligibility for English 101 and Mathematics 140, or higher or consent of Department Chairperson.



## **PHYSICIAN'S ASSISTANT**

## **PHYSICIAN'S ASSISTANT 101**

## Applied Clinical Skills I

Basic skills applicable to the clinical environment including interpretation and theory of body fluids and tissues, and their implications in arriving at preliminary diagnosis. Topics include clinical biochemistry, hematology and urinalysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Physician's Assistant 110 with a grade of C or better and admission to the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## **PHYSICIAN'S ASSISTANT 102**

## **Medical Sciences I**

Systematic approach to theory of clinical medicine, including the pathophysiology of human disease. Epidemiology, dermatology, otolaryngology, ophthalmology and cardiovascular medicine for pediatric, adult and geriatric patients. The lab will combine and alternate small group discussion and presentation with research and role playing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Physician's Assistant 110 with a grade of C or better and admission to the Physician's Assistant Program/Plan 262.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## **PHYSICIAN'S ASSISTANT 103**

## **History and Physical Assessment I**

Clinical data gathering skills, and introduction to physical examination using the problem-oriented medical record and patient simulation. Normal history, physical and neurological exam and progressive case presentations which correlate with the pathophysiology of disease systems covered in Physician's Assistant 102. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physician's Assistant 110, and admissions into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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## PHYSICIAN'S ASSISTANT 104

Applied Clinical Skills II

The student is exposed to the basic concepts and skills of electrocardiography, radiology, intravenous procedures, Laryngoscopy and intubations, suturing skills, casting and splinting. Basic Life Support and Advanced Cardiac Life support certification. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 105 Medical Sciences II

Continuation of the systematic approach to the theory of clinical medicine including pathophysiology of human disease, illness and injury. Neurology, behavior science, infectious disease, gastroenterology, endocrine, musculoskeletal, hematology and oncology. Professional development and alternative/cultural issues are covered. The lab will combine and alternate small group discussions and presentations with research and role playing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Physician's Assistant 102 and admission to the Physician's Assistant Program/ Plan 262.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## **PHYSICIAN'S ASSISTANT 106**

## **History and Physical Assessment II**

Normal history, physical and neurological exam and progressive case studies correlating with the clinical symptoms covered in Physician's Assistant 105 includes obstetrical and gynecological exam using patient simulations and patient models, and physical assessment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262, and Physician's Assistant 103 course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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## PHYSICIAN'S ASSISTANT 107

## Medical Pharmacology I

Basic principles of pharmacology including pharmacokinetics, drug action, interaction and toxicity. Physiological and biochemical actions, absorptions distribution, metabolism. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### PHYSICIAN'S ASSISTANT 109 Medical Sciences III

Continuation of systematic approach to the theory of clinical medicine to include the following areas of concentration: pediatrics, OB/Gyn, geriatrics and long-term care and surgery. Basic concepts and procedures of surgery including preoperative and postoperative conditions including orientation in anesthesiology, radiology and emergency triage and care. Professional development and alternative/cultural issues are covered. The students will also be oriented to the care and management of patients in a long term care facility. The lab will combine and alternate small group discussions and presentations with research and role playing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Physician's Assistant 105 with a grade of C or better and admission to the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 110

## **Gross Anatomy for Physician's Assistants**

This course covers identification and description of major organ systems relevant to the practicing clinician in primary care. The course includes laboratory (cadaver) experience and pathophysiology. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.



### **PHYSICIAN'S ASSISTANT 111**

## **Professional Development for Physician's Assistants**

A first year course for Physician's Assistant that reviews the history and an overview of core competencies that discuss political issues, ethical issues, crosscultural perspectives, and current trends of Physician's Assistant profession in the healthcare industry. Writing assignments, as appropriate to the discipline are part of the course (15 hours of lecture and presentations will be provided).

1 LECTURE HOUR. 1 CREDIT HOUR.



## **PHYSICIAN'S ASSISTANT 112**

#### Pathophysiology I for Physician's Assistants

This course in Pathophysiology for Physician's Assistants provides an introduction to clinical medicine. Topics include a presentation of the mechanisms underlying disease and how such mechanisms facilitate basic disease entities. Other topics include cell structure and function, cell response, genetic control of cell function, and genetic and congenital disorders. Writing assignments, as appropriate the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 113

## Pathophysiology II for Physician's Assistants

A first year course in pathophysiology for Physician's Assistant covering an introduction to clinical medicine. The course is designed to present an orientation to disease as altered health physiology. The understanding of the mechanisms underlying disease and to facilitate the basic disease entities will be presented. The analyzing the mechanism of production of the symptoms and signs of different disease syndromes is presented by organ systems through two semesters. The second semester covers: disorders of the cardiovascular system/disease, respiratory function, renal function and fluid and electrolytes, the nervous system, Neoplasia and blood disorders, gastrointestinal disease and liver disease, disorders of the exocrine pancreas, disorders of the hypothalamus and pituitary gland, thyroid disease, disorders of the adrenal cortex, disorders of the female reproductive tract, disorders of the male reproductive tract. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Physician's Assistant 112 course, and admission into the Physician's Assistant Program/Plan 262.

#### 2 LECTURE HOURS. 2 CREDIT HOURS.



## **PHYSICIAN'S ASSISTANT 114**

## **Medical Pharmacology II**

Students are introduced to the basic principles of pharmacology including pharmacokinetics, drug actions, drug interaction and drug toxicities involved in the clinical use of drugs. Emphasis will be placed on the physiological and biochemical actions, absorption, distribution, metabolism, excretions and therapeutic use of drugs in the following areas: oral hypoglycemic/insulin, thyroid agents, steroids, hormones, analgesics, antipyretics, gastrointestinal medications, anticonvulsant, psychotropic medications, antineoplastics, and over the counter medications. Counter medications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **PHYSICIAN'S ASSISTANT 201**

## Internal Medicine

Students on site in the Department of Medicine will, under supervision, be assigned patients for medical history, physical examinations, diagnostic testing and patient management within the limitations imposed by their education and experience. They also will attend daily rounds and special conferences, participating, where possible, in diagnosis and formulation of therapeutic plans. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.

MX

#### PHYSICIAN'S ASSISTANT 202 Emergency Medicine

Students on site in the Department of Medicine will, under supervision, participate in the assessment, diagnosis and treatment of diseases and disorders in internal medicine. Students will rotate through Intensive Care Unit, Coronary Care Unit and Emergency Room. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.

MX

## PHYSICIAN'S ASSISTANT 203 General Surgery

Students on site in the Department of Surgery will be assigned patients for medical history review, physical examination, diagnostic testing, and within limits imposed by education and previous experiences, patient management, including supportive involvement in major and minor surgical procedures. They will attend daily rounds and special conferences, participating, when possible, in preoperative confirmation of clinical impression and preparation of patient surgical procedures, as well as in post-surgical care. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



#### PHYSICIAN'S ASSISTANT 204 Trauma Surgery

Students on site in the Department of Surgery, under supervision, will be assigned patients for medical history review, physical examination, diagnostic testing, and within limits imposed by education and previous experience, patient management, including supportive involvement in major and minor surgical procedures. They will attend daily rounds and special conferences, participating, when possible, in preoperative confirmation of clinical impression and preparation of patient surgical procedures, as well as post-surgical care. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.



## **PHYSICIAN'S ASSISTANT 205**

## Pediatrics

Students on site in the Department of Pediatrics will, under supervision, participate in patient care activities in outpatient clinics, emergency room, and pediatric inpatient services. They will be assigned patients for medical history review, physical examinations, and diagnostic testing in preparation for supportive roles, in the patients management. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262. 2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 206

## **Obstetrics and Gynecology**

Students on site in the Department of Obstetrics and Gynecology will, under supervision, participate in patient care activities with emphasis during this rotation on patients who have reproductive tract abnormalities and to those involved with normal or complicated pregnancies. Students will be assigned patients for medical history review, physical examination and diagnostic testing in preparation for a supportive role during labor and delivery or gynecologic surgery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262. 2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



#### PHYSICIAN'S ASSISTANT 207 Family Practice

Students on site in the Department of Family Practice will, under supervision, be assigned patients for medical history review, physical examinations, diagnostic testing, and within limitations imposed by education and experience, patient management. They will also attend daily rounds and special conferences, participating in the diagnosis and formulation of therapeutic plans. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262. 2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



#### PHYSICIAN'S ASSISTANT 208 Psychiatry and Mental Health

Students on site in Department of Psychiatry and Mental Health will, under supervision, be assigned patients for medical history, physical examinations, diagnostic testing and patient management, performance of psychiatric history and mental status examination, and participation in and understanding of basics of therapeutics in the Mental Health Education Log. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 209 Geriatric Medicine

Students on site with a combination of patient care in geriatric medicine and longterm care, under the supervision of a physician, will be assigned to patients for medical history, physical examinations, diagnostic testing, medical procedure, and patient management within the limitations imposed by their education and experience. Students will attend and participate in daily medical rounds and special education conferences. Students will participate, where possible, in the diagnostic and formulation of medical plans and interventions. Students are expected to be familiar with diagnostic interviews, therapeutic communications, and an interdisciplinary approach to patient healthcare management. Patient and family education, critical thinking, evidence based writing assignments, and intense selfdirected study, as appropriate to the discipline, are part of the course. Weekly contact with program through the Clinical Coordinator is also required. Course requires a minimum of 40 clinical rotation hours per week for 4 weeks including on call, weekend, and swing shift medical coverage. Two of the weeks will be spent at the campus doing a clinical lab for developing teaching skills with focus in geriatric issues.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.

MX

## PHYSICIAN'S ASSISTANT 210

Orthopedics

Students on site in the Department of Surgery will, under the supervision of a physician, be assigned patients for medical history, physical examinations, diagnostic testing, medical procedure, and patient management within the limitations imposed by their education and experience. Students will attend and participate in daily medical rounds and special education conferences. Students will participate, where possible, in the diagnosis and formulation of medical plans and interventions. Students are expected to be familiar with preoperative clinical assessments, patient preparation for surgical procedures, post-operative patient management, diagnostic work-up, and an interdisciplinary approach to patient healthcare management. Patient and family education, critical thinking, evidence based writing assignments, and intense self-directed study, as appropriate to this discipline, is part of this course. Weekly contact with program through the Clinical Coordinator is also required. Course requires a minimum of 40 clinical rotation hours per week for 4 weeks including on call, weekend, and swing shift medical coverage. After eight weeks students return to the campus for didactic seminars and board reviews.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262. 2 LECTURE HOURS AND 5 LAB HOURS, 3 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 211

## **Elective Clinical Rotation**

Student will select an area of medical interest for their elective rotation. Focus on primary care is encouraged. Elective rotations site will follow established departmental guidelines plus any additional restrictions mandated by rotation site. Established general outline for our students are that students are under physician supervision, that they be assigned to patients for medical history, physical examinations, diagnostic testing, medical procedures, and patient management within the limitations imposed by their education and experience. Students will attend and participate, in daily medical rounds and special medical education conferences. Students will participate, where possible, in the diagnosis and formulation of medical plans and interventions. Students are expected to be familiar with an interdisciplinary approach to patient healthcare management. Patient and family education, critical thinking, evidence based writing assignments, and intense self-directed study, as appropriate to this medical discipline, are part of this course. Additional students guidelines will be addressed, defined, and agreed to by the Clinical Rotation site, students, and the Physician's Assistant Program/Plan 262 prior to the beginning of the clinical clerkship. Weekly contact with program through the Clinical Coordinator is also required. Course requires a minimum of 40 clinical rotations hours per week for 4 weeks including on call, weekend, and swing shift medical coverage. This course is taken near the end of the Program/Plan 262.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



## PHYSICIAN'S ASSISTANT 213

**Special Topics In Health Care** 

Seminars, discussions, board reviews and peer mentoring group sessions that focus on special topics in healthcare. The primary areas of study include topics related to but not limited to internal medicine, primary care and issues of the PA professions. Students are required to take a minimum of 1 credit hour per semester. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Courses may be repeated up to three times and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability.

Prerequisite(s): Admission into the Physician's Assistant Program/Plan 262.

2-4 LECTURE HOURS. 2-4 CREDIT HOURS.

## MX

## **PHYSICIAN'S ASSISTANT 214**

## **Independent Study**

Course is designed to increase students level of medical knowledge on a specific topic and to serve as in introduction for advanced medical research for future projects. Elements of medical research will be discussed to enhance students critical thinking skills. Students will be required to select a specific topic related medical issues in an underserved population or community. Students are required to perform independent research skills and interpret their own findings, as well as the supporting evidence found in current medical literature. Findings will be written and orally presented by students at the end of the second academic year. (Students sign up each semester for a one credit hour.) Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed Repeatable</u> <u>Course:</u> Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability. <u>ARC: 4 times.</u>

Prerequisite(s): Admission to the Physician's Assistant Program/Plan 262.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



#### PHYSICIAN'S ASSISTANT 215 Nutritional Concepts

Concepts of applied anatomy, physiology and chemistry in human metabolism and nutrition; planning, selecting and preparing diets for specific diseases or combination of disorders requiring modified diets. Included are enteral and parenteral nutrition support. Relates pathophysiology of the cardiovascular, renal, digestive, endocrine systems, and metabolic imbalances to the application of diet therapy. Skills and techniques for modifying diets for individuals including diet counseling are emphasized relative to diseases and symptom, and relative to health promotion. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

MX

## PHYSICAL THERAPY ASSISTANT

#### PHYSICAL THERAPY ASSISTANT 110 Introduction to Physical Therapy

This course introduces the field of physical therapy including the history and standards of practice for the physical therapist assistant and basic treatment techniques. Emphasis is placed on ethical and legal considerations, universal precautions, vital signs, documentation, basic patient preparation and treatment skills, and architectural barrier screening. Upon completion, students should be able to explain the role of the physical therapist assistant and demonstrate competence in basic techniques of patient care. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, admittance into the Physical Therapy Assisstant Program, or consent of Program Director/Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.

MX

## **PHYSICAL THERAPY ASSISTANT 150**

## **Therapeutic Procedures I**

This course covers superficial thermal agents, massage, ultrasound, and documentation methods. Emphasis is placed on physiological effects, indications, contraindications, and skilled applications of heat, cold, ultrasound, massage, and documentation. Upon completion, students should be able to safely, correctly, and effectively apply these techniques and procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, admittance into the Physical Therapy Assisstant Program, or consent of Program Director/Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### PHYSICAL THERAPY ASSISTANT 160 Therapeutic Exercise

This course covers superficial thermal agents, massage, ultrasound, and documentation methods. Emphasis is placed on physiological effects, indications, contraindications, and skilled applications of heat, cold, ultrasound, massage, and documentation. Upon completion, students should be able to safely, correctly, and effectively apply these techniques and procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): English 101, admittance into the Physical Therapy Assisstant Program, or consent of Program Director/Department Chairperson.



## **PHYSICAL THERAPY ASSISTANT 170**

## **Therapeutic Procedures II**

This course is a continuation of PTA 150, emphasizing the theory and practice of electrotherapy, ultraviolet, hydrotherapy, wound care and burn care, and deep heating modalities. Topics include application of deep heating modalities, aquatic therapy, edema reduction, high and low frequency electrical currents, and biofeedback. Upon completion of this course, students should be able to apply these modalities and treatment techniques effectively and safely and demonstrate knowledge of physiological principles involved. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in PTA 110, 150 and ESSS 110 or consent of Program Director/Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



## **PHYSICAL THERAPY ASSISTANT 190**

## Therapeutic Procedures III

This course introduces treatment and measurement techniques and discusses treatment programs for neuromusculoskeletal dysfunction and injury. Topics include soft tissue and joint dysfunction; assessment of girth, volume, length, sensation, pain, and muscle strength; and selected exercise programs. Upon completion, students should be able to measure strength and joint motion and identify methods to assess sensation, pain, volume, girth, length, and gait abnormalities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in PTA 110, 150, 160 and ESSS 110, or consent of Program Director/Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



## PHYSICAL THERAPY ASSISTANT 200

## Pathophysiology

This course is a survey of basic pathology with emphasis on conditions most frequently observed and treated in physical therapy. Topics include etiology, pathology, manifestation, treatment, and prognosis. Upon completion, students should be able to explain repair processes, categorize diseases, define pathology, identify organ/body systems involved, and discuss treatment and prognosis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in PTA 110, 150, 160 and ESSS 110, or consent of Program Director/Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **PHYSICAL THERAPY ASSISTANT 211**

#### **PTA Clinical Education I**

This course provides a short-term affiliation for planned learning experiences and practice under supervision. Emphasis is placed on basic skills including patient transfers, elementary exercise programs and other learned skills. Upon completion, students should be able to demonstrate satisfactory performance as an introductory-level physical therapist assistant student. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): First year completion of PTA program with a minimum grade point average of 2.0 or consent of Program Director/Department Chairperson.

2 CREDIT HOURS.

## PHYSICAL THERAPY ASSISTANT 221 PTA Clinical Education II

This course provides a short-term affiliation for planned learning experiences and practice under supervision. Emphasis is placed on basic skills including patient transfers, elementary exercise programs and other learned skills. Upon completion, students should be able to demonstrate satisfactory performance as an introductory-level physical therapy assistant student. Writing assignments, as appropriate to the discipline, are part of the course.

2 CREDIT HOURS.



## PHYSICAL THERAPY ASSISTANT 230 Therapeutic Procedures IV

This course covers normal development, adult and pediatric/CNS dysfunction, spinal cord injuries, amputee rehabilitation techniques, and cardiopulmonary rehabilitation. Topics include neurology review, selected rehabilitation techniques, ADL and functional training, prosthetic and orthotic training, and environmental access. Upon completion, students should be able to demonstrate safe and correct application of selected rehabilitation techniques for neurological dysfunction, cardiopulmonary conditions, and amputations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): First year completion of PTA program with a minimum grade point average of 2.0 or consent of Program Director/Department Chairperson.

3 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.

MX

#### PHYSICAL THERAPY ASSISTANT 260 Advanced PTA Clinical Education

This course provides full-time clinical affiliations for planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care, communications, and professional behaviors. Upon completion, students should be able to demonstrate satisfactory performance as an entry-level physical therapist assistant and as a member of the physical therapy team. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): First year completion of PTA program with a minimum grade point average of 2.0 or consent of Program Director/Department Chairperson. **10 CREDIT HOURS.** 

## PHYSICAL THERAPY ASSISTANT 280

**Physical Therapy Assistant Topics** 

This course covers the physical therapist assistant profession in preparation for the state licensure exam. Topics include developing time management skills and practicing for the competence examinations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in PTA 260 or consent of Program Director/Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PHYSICS

## PHYSICS 102

## **Alternating Current**

Principles of electromotive force, current and power in AC circuits, vector solution of AC circuits, series and parallel resonance, measurements, transformer, impedance matching. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 132, or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS, 3 CREDIT HOURS.



## PHYSICS 132

## **Electricity Heat and Light**

Continuation of Physics 131. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 131, or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

DA

## PHYSICS 215

## Statics

Rigid bodies, fluid statics, friction, moments of inertia, centroids, and virtual work. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 235 and Mathematics 208, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: DA HW WR

## PHYSICS 216

## **Dynamics**

Problems in kinematics, dynamics of a particle and a system of particles, dynamics of a rigid body, work, energy, small oscillations, and general plane motion. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 235 and Mathematics 208, or consent of Department Chairperson.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



IAI/MAJOR: DA HW WR

## PHYSICS 217

## **Mechanics of Materials**

Study of elastic and inelastic relationships of external forces acting on deformable bodies. Includes stresses and deformations produced by tension and compression, torsion and bending, combined stresses, buckling, repeated loads, impact, and influence of properties of materials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 215, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



IAI MAJOR: DA HW WR

## PHYSICS 222

## **Electricity, Light, and Modern Physics**

Continuation of Physics 221. Exploration of Electromagnetism, Light and Modern Physics using an algebra based approach. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 221 and Mathematics 141 and eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



## PHYSICS 224

## **Physics Calculations and Practice**

For students majoring in engineering or physical sciences. Detailed practice in problems and application of theory involving calculus to provide better understanding of physics. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 235, or consent of Department Chairperson.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## PHYSICS 232

#### **General Physics II: Electricity and Magnetism**

Electrostatics, magneto statics, laws of DC and AC circuits, electromagnetic radiations and elementary electronics. Primarily for liberal arts students and those in pre-medical curricula. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 231, or Physics 235, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



## PHYSICS 233

## **General Physics III: Heat Light and Modern Physics**

Introductory thermodynamics, geometrical and physical optics, atomic and nuclear radiations and associated elementary quantum aspects. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 231 or Physics 232, or consent of Department Chairperson.



# **COURSE DESCRIPTIONS**

Credit Courses (A-Z)

## PHYSICS 236

## **Engineering Physics II: Electricity and Magnetism**

Exploration of electricity and magnetism as they relate to fields, forces and energy using calculus to analyze theoretical and practical problems in lecture and laboratory. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Physics 235, and Mathematics 207 and Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.



## PHYSICS 237

## **Engineering Physics III: Heat Light and Modern Physics**

Exploration of the laws of heat, light, and modern physics and analysis of practical and theoretical problems through the use of calculus. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 207 and Physics 235, and Eligibility for English 101 or consent of Department Chairperson.

2 LECTURE HOURS AND 6 LAB HOURS. 5 CREDIT HOURS.

#### PHYSICS 295

#### **Independent Research in Physics**

This course emphasizes independent, student-driven research under the close supervision of a faculty member. Eligibility for course repetition for additional credit hours is determined by the instructor. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Eligibility for course repetition for additional credit hours is determined by the instructor. No more than an accumulated 12 credit hours will be counted towards graduation.

Prerequisite(s): Eligibility for English 101 and Mathematics 140 or higher or consent of Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS. 1-6 CREDIT HOURS.



## POLISH

## POLISH 101

#### **First Course Polish**

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



## POLISH 102

## Second Course Polish

Continuation of Polish 101. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Polish 101.

4 LECTURE HOURS. 4 CREDIT HOURS.



## POLISH 103

## **Third Course Polish**

Review and development of basic language skills, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Polish 102.

4 LECTURE HOURS. 4 CREDIT HOURS.



## POLISH 206

## **Intensive Oral Practice Polish**

Practice in spoken language, fluency and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Polish 104. 4 LECTURE HOURS. 4 CREDIT HOURS.



## POLISH 210

## Modern Civilization and Culture: Polish

Recent social, cultural, and historical trends, conducted in Polish and English. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



## POLISH 213

#### Introduction to Modern Literature Polish

Selections from contemporary writings, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test, or Polish 104.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **PROCESS TECHNOLOGY**

## PROCESS TECHNOLOGY 115

Introduction to Process Technology

Introduction to the field of process industry operations and a review of the roles and responsibilities of process technicians, the environment in which they work, and the equipment and systems that they operate. Students will be introduced to many process industry equipment concepts, including purpose, components, operation, and the Process Technician's role toward the equipment. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

## ОН

#### PROCESS TECHNOLOGY 116 Process Instrumentation I

Introduction into the field of instrumentation as it relates to equipment used in the process industry. Within this course, students will use existing knowledge of equipment, and learn how instrumentation is used to control variables. Studies instruments and instrument systems used in the petrochemical process industry, including terminology, process variables, symbology, control loops, and basic troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.



## PROCESS TECHNOLOGY 117

#### **Process Instrumentation II**

This course is to provide an overview into the field of instrumentation as it relates to operations within the process industry. Within this course, students will use existing knowledge of equipment, systems, and instrumentation to understand the operation of an entire unit. Students study concepts related to commissioning, normal startup, normal operations, normal shutdown, turnarounds, and abnormal situations, as well as the Process Technician's role in performing the task associated with these concepts within an operating unit. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Process Technology 116.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## **PROCESS TECHNOLOGY 118**

## **Process Technology Equipment**

This course provides an overview and introduction into some of the equipment and vessels, and their operations, within the Process Industry. Students will be introduced to process industry equipment fundamentals, such as purpose, terminology, components, operation, and Process Technician's role for operating and troubleshooting the equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Process Technology 116.

4 LECTURE HOURS AND 4 LAB HOURS. 6 CREDIT HOURS.



## **PROCESS TECHNOLOGY 119**

## Safety, Health and Environment

Introduction to various types of plant hazards, safety and environmental systems and equipment, and regulations under which the process industry is governed. This course is also designed to impart the knowledge and skills that dictate the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis is on safety, health and environmental issues in the performance of all job tasks and regulatory compliance issues. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Process Technology 115.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### PROCESS TECHNOLOGY 202 Quality Control

Introduces many process industry-related quality concepts including operating consistency, continuous improvement, plant economics, team skills, and statistical process control (SPC). Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Process Technology 118.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### PROCESS TECHNOLOGY 203 Unit Systems

Introduces the concept of system and plant economics; studies the interrelation of process systems by arranging process equipment into basic systems; explain how factors affecting process systems are controlled under normal conditions; and recognizes abnormal process conditions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Process Technology 119.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### PROCESS TECHNOLOGY 204 Operations

Introduction of the various types of plant hazards, safety and environmental systems and equipment, and regulations under which the industry is governed. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Grade of C or better in Process Technology 203.* 

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

ОН

## **PROCESS TECHNOLOGY 205**

## **Process Troubleshooting**

This course is an application of process control with the use of computer-simulated exercises. The use of process control simulations challenges students to exercise logical troubleshooting techniques to solve operational problems. The course utilizes ""what if drills"" to enhance troubleshooting skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Process Technology 203.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

## ОН

## **PROCESS TECHNOLOGY 206**

Process Technology Internship

Participation in occupational area of study work experience under supervision of both college and employer. Internship objectives developed by student and faculty advisor, with approval of employer, to provide appropriate work-based learning experience. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson.

3 LAB HOURS. 3 CREDIT HOURS.

ОН

## **PSYCHIATRIC REHABILITATION**

#### **PSYCHIATRIC REHABILITATION 101** Survey of Psychiatric Rehabilitation

This course is the first in the series for the Psychiatric Rehabilitation certificate. Courses in the series focus on a rehabilitative approach to servicing individuals with severe mental illness. This approach is based on the premise that consumers set the goals for the rehabilitation team. The survey course has four major themes: understanding psychiatric disability and current approaches to treatment, the mental health system and surrounding legal issues, psychiatric rehabilitation through vocational and skills training, and family and community support systems. The orientation of the course is more practical than theoretical and there is considerable opportunity to observe and practice relevant skill. Consumers serve as guest speakers to highlight issues of empowerment and stigma and to increase understanding of consumer experiences with the mental health system. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **PSYCHIATRIC REHABILITATION 102**

## **Psychiatric Rehabilitation Skills**

This course is the second in the series for the Psychiatric Rehabilitation Certificate. The orientation of the course is more practical than theoretical, and there is considerable opportunity to observe and practice relevant skills. Students learn basic techniques for conducting interviews for use in assessment, treatment planning, and therapeutic interactions with consumers. Students learn to conduct skills training groups and apply behavioral techniques for implementing programs that promote desired skills. Techniques for intervening in crisis situations and preventing and managing aggression are presented. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability. **ARC: 4 times.** 

Prerequisite(s): Grade of C or better in Psychiatric Rehabilitation 101. 3 LECTURE HOURS. 3 CREDIT HOURS.



#### **PSYCHIATRIC REHABILITATION 103**

## Health Skills Psychiatric Rehab

This course examines three-dimensions of wellness: physical, emotional and environmental. Students will learn the fundamentals of physical wellness, including diet, nutrition, exercise, sanitation, disease prevention and control, and special health considerations for persons with severe mental illness. The emotional dimension of wellness includes social support, physical and sensory accommodations, and geriatric and developmental disabilities. Students will learn the essentials of environmental safety, including use of safety equipment and proper body mechanics. Students will develop and practice skills for determining vital signs and documenting their observations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Psychiatric Rehabilitation 101.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PSYCHOLOGY

## **PSYCHOLOGY 210**

## **Principles of Supervisory Psychology**

Psychological principles applied to problems with employees, both from the standpoint of management and of employees. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201, or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS,

S LECTORE HOURS. S CREDIT HOURS.



#### **PSYCHOLOGY 213** Abnormal Psychology

Abnormal behavior and its social significance; symptoms and dynamics of psychological disorders; neuroses and psychosomatic reactions, sociopathic psychoses; consideration of therapies and theories of prevention. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201, or consent of Department Chairperson. 3 LECTURE HOURS, 3 CREDIT HOURS.



## PSYCHOLOGY 215

## **Psychology of Personality**

Major personality theories to familiarize students with systems concerned with comprehensively and dynamically interrelating developmental, motivational, and adaptive aspects of behavior; methods of personality assessment and experimental evidence relevant to the theories will also be considered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201, or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



## PSYCHOLOGY 223

## **Death, Dying and Bereavement**

This course will introduce students to psychological problems, issues, facts, theories, opinions, and controversies pertaining to death or loss, the dying process, and bereavement as a response to loss. It will deal with societal values, institutions, psychological variables, the nature of dying and bereavement, the effects of loss on the surviving individual, adjustment and coping problems, relevant behavioral and emotional reactions, and alternatives to societal institutions surrounding death. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **PSYCHOLOGY 240**

## Research and Statistical Methods in the Behavioral Sciences

Study of methods used in the systematic study of psychology, including psychometric concepts, understanding and application of statistical operations (computer-based), and critique of scholarly empirical reports. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Psychology 201 and consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## PSYCHOLOGY 299

## Special Topics in Psychology

Special topics in Psychology will be discussed along with appropriate lab and/ or field trip activities. New developments in the field will be emphasized .Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability.

Prerequisite(s): Grade of C or better in Psychology 201 or consent of Department Chairperson.

6 LECTURE HOURS. 6 CREDIT HOURS.

## PUBLIC SERVICE (069)

## PUBLIC SERVICE 130 Police Operations I

Orientation; police administration and organization; rules and regulations; policy and procedures. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



## **PUBLIC SERVICE 131**

## **Communication and Case Reporting**

Fundamentals of note taking, directives, traffic reports and interviews. Emphasis will include composition of police narrative writing primarily in terms of the organization and language of such reports commonly used by law enforcement officers. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130, or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PUBLIC SERVICE 132

## Law and Court Procedures

Principles of constitutional law, arrest, ethics, search and seizure; review of court systems, procedures from initial incident to final court disposition. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



## **PUBLIC SERVICE 133**

## Law Codes I

Analysis of state and municipal codes as they apply to law enforcement. Emphasis on structure, essential elements and most frequently used sections. Review of day to day duties of a law enforcement officer. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130, 131, and 132, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## PUBLIC SERVICE 134

**Criminal Investigation I** Fundamentals of investigation, identification and arrest; collection of evidence; modus operandi. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130, 131, and 132, or consent of Department Chairperson.

4 LECTURE HOURS. 4 CREDIT HOURS.



## **PUBLIC SERVICE 135**

## **Problems in Human Behavior**

Study of normal and deviant behavior, collective behavior and narcotics offenses. Study of interpersonal relations from the perspective of working and serving the public from various background and cultures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130 and Public Service 132, or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PUBLIC SERVICE 136

## **Professional Skills for Police Officers**

Field training and techniques used in conducting criminal investigations, or in another appropriate area of law enforcement approved by the instructor. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130, 131, 132, and 133, or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## PUBLIC SERVICE (230)

## Police Operations II

Review of police line operations including patrol, traffic and special operational units; operations for civil disorders and disasters. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Public Service 130, 131, 132, and 133, or consent of Department Chairperson.

2 LECTURE HOURS. 2 CREDIT HOURS.



## RADIOGRAPHY

## **RADIOGRAPHY 101**

## Introduction to Radiation Sciences

Fundamental concepts of medical imaging and the radiation sciences; includes origins of the profession, common terminology and chemicals; technical factors influencing development of the radiograph and technical factors which produce the image. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Admission into the Radiography Program/Plan 246.* 

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## RADIOGRAPHY 102

## **Attitudes in Patient Care**

Skills needed for proper patient care; includes physical and psychological skills necessary to cope with various situations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.



## **RADIOGRAPHY 105**

## **Imaging Physics**

Structure of matter, electric circuitry, especially the x-ray circuit, interactions between ionizing radiation and matter and principles necessary for production of radiographic image. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admissions into the Radiography Program/Plan 246 and Grade of C or better in Radiography 101.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

## **RADIOGRAPHY 115**

#### **Basic Principles of Image Production**

Analysis of various technical factors and accessories which affect radiographic image; includes basic qualitative factors of image production, and laboratory experiments. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admissions into the Radiography Program/Plan 246 and Grade of C or better in Radiography 101.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## RADIOGRAPHY 124

## Introduction to Patient Care

Proper positioning and basic nursing procedures necessary for patient care; includes proper placement and manipulation of patient and equipment. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **RADIOGRAPHY 128**

## **Image Evaluation**

Analysis of image and quality of radiographs images submitted for interpretation; covers patients size, cooperation and pathological condition relative to and influencing accuracy and quality of resultant image. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR. 1 CREDIT HOUR.



## **RADIOGRAPHY 131**

## **Radiographic Procedures I**

Proper positioning of patient for demonstration of suspect pathology of abdomen and its contents, correlated with course in anatomy and physiology, and routine and contrast media procedures. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **RADIOGRAPHY 140**

## Introduction to Clinical Education

Physical and technical skills needed to apply ionizing radiation to human beings; clinical orientation and assessment to determine professional preparedness. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 30 LAB HOURS. 4 CREDIT HOURS.



## **RADIOGRAPHY 141**

## **Radiography Clinical Education I**

Orientation and initial skills development in basic radiographic procedures; visualization of abdomen and its contents stressed to prepare student for further study in major area of specialization; includes communication, operation of equipment, patient care and technical skills development. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 30 LAB HOURS. 4 CREDIT HOURS.



#### RADIOGRAPHY 200 Pathology

Covers disease process with radiographic manifestations; laboratory sessions include use of radiographs and images from other modalities to visualize various types of pathologic conditions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### RADIOGRAPHY 202 Radiology Management

Administration, purchasing and personnel control; practical experience in department administration. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Advanced standing in the Radiography Program/Plan 246.

1 LECTURE HOUR. 1 CREDIT HOUR.

## **RADIOGRAPHY 205**

#### **Applied Radiographic Techniques**

Practical applications of previously learned concepts; effects of technical factor selection, use of accessories and changes in patient type and condition. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Advanced standing in the Radiography Program/Plan 246.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



## **RADIOGRAPHY 206**

#### Imaging

The components of radiological imaging system chains; imaging systems will be explored, including current systems and new and emerging modalities. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **RADIOGRAPHY 208**

## Radiobiology

Effects of radiation on cells, organs, and organisms and implications on present and future populations, use of ionizing radiation in internal and external treatment of benign and malignant disease. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### RADIOGRAPHY 232 Radiographic Procedures

**Radiographic Procedures II** 

Positioning and patient-care skills applied to additional body systems and correlated with clinical study; proper positioning of patient for demonstration of suspect pathology correlated with previous procedures; includes skeletal and urinary systems. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.



## **RADIOGRAPHY 233**

## **Radiographic Procedures III**

Study of additional body systems; includes procedures less frequently performed and those requiring special skills or equipment; procedures covered will not normally require invasive techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



## RADIOGRAPHY 234

## **Special Radiographic Procedure**

Procedures frequently performed in modern department but which employ surgical or other invasive techniques and injection of contrast media into circulatory system; covers emergency procedures and pertinent aspects of some pharmaceuticals. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Advanced standing in the Radiography Program/Plan 246. **1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.** 



## **RADIOGRAPHY 242**

#### **Radiography Clinical Education II**

Application of concepts learned in related radiography classes; emphasis on progression from role of observer to assistant, then to relative independence under supervision of qualified clinical instructors, radiographers and faculty. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 30 LAB HOURS. 4 CREDIT HOURS.



### **RADIOGRAPHY 243**

## **Radiography Clinical Education III**

Progression from role of assistant to greater independence under supervision of qualified clinical instructors. Quality and related aspects of special consent will be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 30 LAB HOURS. 4 CREDIT HOURS.



#### **RADIOGRAPHY 244**

## **Radiography Clinical Education IV**

Progression of student to full clinical independence, upon demonstrating clinical competency. Student can refine skills through independent practice. Includes field experiences in elective specialization. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Radiography Program/Plan 246.

1 LECTURE HOUR AND 40 LAB HOURS. 5 CREDIT HOURS.



## READING

## **READING 99**

## **Developmental Reading Skills I**

Provides skills necessary for efficient reading of textbooks and other materials. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for Reading 99 by COMPASS Placement test or consent of Department Chairperson.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



## **READING 125**

## **Developmental Reading Skills II**

For students who need to improve their reading skills; efficient reading of textbooks and other materials including work in mechanics of reading, vocabulary development, comprehension, and rate of reading. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Reading 99, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## READING 126

## **Structural Analysis and Critical Reading**

Ability to read and to analyze college level materials. For students with advanced reading skills. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Reading 125, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY**

## **RENAL TECHNOLOGY/NEPHROLOGY 101**

**Introduction to Hemodialysis and Hemodialysis Procedures** Structure and function of kidneys and role of kidneys in maintaining homeostasis. Basic chemistry of body fluids and electrolytes. Acid base balance, fluid overload and calculation of fluid overload for dialysis patients. Chronic kidney disease and stages of chronic kidney disease. End stage renal disease and treatment options. Professionalism, ethical issues and continuous quality improvement in hemodialysis. Today's dialysis environment and the role of regulatory agencies and organizations for hemodialysis and peritoneal dialysis patient care. Infection control and safety in dialysis units. Patient assessment for hemodialysis and data collection. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Grade of C or better in Health Professions 101 or consent of Department Chairperson and admission into the Renal Dialysis Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY 102**

#### **Basic Hemodialysis Procedures I**

Dialysis equipment, and machine assembly, blood lines, side ports and monitors, blood pump, air bubble detector, types of dialyzers, dialysis solution circuit and monitors. Individual versus central dialysate proportioning system, conductivity meter, machine preparation for operation, safety checks for dialysis machine, safety monitors and safety alarms, machine disassembly, internal and external machine disinfection, water treatment (deionization and reverse osmosis), uses of medication for dialysis patients and patient education on the use of medication, coagulation mechanisms, anticoagulation, heparinization and heparin pump and heparin free dialysis.. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Grade of C or better in Health Professions 101 or consent of Department Chairperson and admission into the Renal Dialysis Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY 103**

## **Basic Hemodialysis Principles and Practice I**

Uremic syndrome and its manifestations, advantages and disadvantages of different replacement therapies. Dialysis adequacy and factors effecting dialysis adequacy. Dialysis prescription and patient care plans for hemodialysis treatment. Access and different types of access for hemodialysis. Access complications, access care, cannulation technique and patient education on hemodialysis access. Patient and machine related complications, identification and management. Patient data recording and analysis. Anticoagulation, heparin use and complications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Grade of C or better in Health Professions 101 or consent of Department Chairperson and admission into the Renal Dialysis Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY 104**

## Hemodialvsis Procedures I

Advantages and disadvantages of various types of machines, dialyzers and supplies. Dialysis related problems: disequilibrium, air embolism, excessive ultrafiltration, dialyzer rupture, dialyzer clotting, line separation, pyrogenic reaction, hemolysis, convulsions, hepatitis. Conductivity and temperature; effect of end stage renal disease on the patient, family, and dialysis personnel; disease control. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Dialysis Technology Program/Plan 248.

6 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY 105**

## Heparinization/Bacteriology in Dialysis

Aseptic technique, medical ethics, legal aspects in the field of nephrology, infectious disease control, isolation techniques, patient care techniques, professional relationships of being a member of a healthcare team, legal aspects of medical records, patient care plan, physician orders, EKG for normal ESRD and arrhythmias. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Dialysis Technology Program/Plan 248.

#### **6 LAB HOURS PER WEEK. 3 CREDIT HOURS.**



## **RENAL TECHNOLOGY/NEPHROLOGY 106**

## **Diagnostic Tests and Procedures in Nephrology**

Diagnostic tests and their interpretation, an overview of bacteriology, virology, hematology, biochemistry and immunology as related to the renal patients. Infection control practices at dialysis units and hospitals will be covered. Hemodialysis access to blood steam, cannulation skills and techniques will be presented and practiced in the lab. Participation in community health screening for detection of early kidney disease. Pharmacological aspects of renal failure and access care will be explored. Patient education regarding nutrition and dietary restrictions for the dialysis patient and on dietary control. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Health Professions 101, Renal Technology/Nephrology 101, 102, 103 and 108. Admission into the Renal Dialysis Technology Program/Plan 248 or consent of Department Chairperson.

6 LAB HOURS PER WEEK. 3 CREDIT HOURS.

## **RENAL TECHNOLOGY/NEPHROLOGY 107** Hemodialysis Procedures II

Theory of negative pressure; laboratory instructions in building, sterilizing, priming, testing, washing, and preparing for use. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK, 3 CREDIT HOURS.



#### **RENAL TECHNOLOGY/NEPHROLOGY 108** Clinical Experience I

Orientation to hemodialysis facility. Orientation to the water treatment equipment for in center dialysis unit and methods to treat water for hemodialysis use. Water testing for contaminants. Auxiliary medical equipment use. Infection control at dialysis units. Laboratory tests for hemodialysis patients and analysis. Blood draw techniques for lab testing in hemodialysis patients. Introduction to patient care, machine set up and breakdown. Patient assessment for start of dialysis, monitoring during dialysis and termination of dialysis. Types of hemodialysis access, assessment and care. Professionalism and communication in the dialysis units. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Grade of C or better in Health Professions 101 or consent of Department Chairperson and admission into the Renal Dialysis Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY 109 Clinical Experience II**

Continuation of clinical experience at assigned clinical sites to enhance the skills of hemodialysis with emphasis on speed and accuracy. Perform access checks and access assessments with accuracy. Enhance cannulation skills under supervision to independently perform cannulation in a safe manner, depending on the unit of policy. Identify access complications, stenosis, infections, clotting or recirculation. Introduces students to new patient education for hemodialysis, learn theory of CRRT (Continuous Renal Replacement Therapy), principles of extracorporeal modalities for solute removal, hemofiltration, and hemodial filtration, learn to handle portable home hemodialysis machine if available at the unit. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Prerequisite(s): Eligibility for English 101, Grade of C or better in Health Professions 101, Renal Technology/Nephrology 101,102,103 and 108, or consent of Department Chairperson and admission into the Renal Dialysis Technology Program/Plan 248. 1 LECTURE HOUR AND 6 LAB HOURS PER WEEK. 4 CREDIT HOURS.





## **RENAL TECHNOLOGY/NEPHROLOGY 201**

## **Renal Physiology and Renal Diseases**

Anatomy of the kidney; microscopic description of renal parenchyma; physiologygeneral mechanism of urine formation; urinary renal function; principal symptoms of end stage renal disease. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



#### **RENAL TECHNOLOGY/NEPHROLOGY 202** Renal Disease and Pathophysiology

The pathophysiology of acute kidney injury, chronic kidney disease, end stage kidney disease, its causes, manifestations and treatment will be presented. Hemodialysis in elderly patients and patients with complications along with dialysis related complications and treatment plans will be discussed. The role of the dialysis technician in providing quality long-term hemodialysis, peritoneal dialysis, patient preparation and education for renal replacement therapy, and transplant medicine are presented. Writing assignments, as appropriate to discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Grade of C or better in Health Professions 101, Renal Technology/Nephrology 101, 102, 103 and 108. Admission into the Renal Dialysis Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RENAL TECHNOLOGY/NEPHROLOGY 203**

## **Clinical Experience III**

This course provides continuation of clinical experience at an assigned clinical site. The student through scheduled rotation receives hands on training and experience to independently put the patient on dialysis and to take the patient off. The student will enhance their skills in managing ESRD patients with co-morbidities like anemia, multiple drug regiments, diabetes, heart and lung disease. The student will identify dialvsis related complications and intervene as required. The student will learn the aspects involved in high flux dialysis. The student will get an opportunity to enhance the skills of machine technology and machine maintenance needed to work as hemodialysis technician. Perform safety checks on the machines; perform machine operation evaluation and maintenance of records. Learn the basic functioning of water treatment component systems, evaluation and maintain the water treatment system as required by the regulatory agencies. Learn to perform hemodialysis using reprocessed dialyzer. The student will participate in personal and professional development activities. BONENT exam review will also be a part of this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101, Grade of C or better Health Professions 101, 102, 103, 106, 108, 109 and 202 or consent of Department Chairperson and admission into the Renal Dialysis Technology Program/Plan 248.

2 LECTURE HOURS AND 4 LAB HOURS PER WEEK. 4 CREDIT HOURS.



#### RENAL TECHNOLOGY/NEPHROLOGY 204 Clinical Experience IV

Continuation of clinical experience in medical facility. Primary emphasis on developing new skills in care and treatment of acute and chronic renal patient; equipment maintenance procedures, emergency procedures, special procedures patient dietary and fluid regulation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Technology Program/Plan 248.

1 LECTURE HOUR AND 4 LAB HOURS PER WEEK. 3 CREDIT HOURS.



#### RENAL TECHNOLOGY/NEPHROLOGY 205 Uremic Syndrome

Renal failure; chronic renal disease; classification–glomerular, tubular, interstitial, vascular, and others; general manifestations of chronic renal disease; anemia; water imbalance, electrolyte abnormalities, gastrointestinal manifestation, neurological manifestations of renal disease; treatment, chronic hemodialysis; renal transplantation and acute hemodialysis. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Technology Program/Plan 248.

2 LECTURE HOURS AND 2 LAB HOURS PER WEEK. 3 CREDIT HOURS.



#### **RENAL TECHNOLOGY/NEPHROLOGY 206** Advanced Technology in Nephrology

Completion of didactic experiences in a classroom setting. New modalities in dialysis; CAPD and new delivery system for dialysis, self-care, home training, complications. Patient pre-and post-teaching for nephrectomy and transplants; peritoneal dialysis; manual and automated. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission into the Renal Technology Program/Plan 248.

150 MINUTES PER WEEK. 3 CREDIT HOURS.

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#### RENAL TECHNOLOGY/NEPHROLOGY 207 Clinical Experience V

Continuation of clinical experience in medical facility, under the supervision of the college coordinator, clinical instructor, staff personnel, and nephrologist. Development of the following skills: advanced cannula and fistula care, administration of blood, blood sample collection, medical community support; advanced principles of hemodialysis, dietary and fluid review. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Renal Technology 203, and Renal Technology 204, or consent of Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS PER WEEK. 3 CREDIT HOURS.

MX

#### RENAL TECHNOLOGY/NEPHROLOGY 208 Clinical Experience VI

Completion of clinical experiences in medical facility CAPD and new delivery systems for dialysis, self-care, home training, complications; chronic and acute patients. Patient pre-and post-teaching for nephrectomy and transplants; peritoneal dialysis, manual and automated; complications and emergency procedures, plasmapheresis, bicard, short-time, hemoperfusion. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Renal Technology 203, and Renal Technology 204, or consent of Department Chairperson.

1 LECTURE HOUR AND 6 LAB HOURS PER WEEK. 3 CREDIT HOURS.



## **RESPIRATORY THERAPY**

## **RESPIRATORY THERAPY 114**

## **Basic Respiratory Care**

Theoretical and protocol based applications of, indications for, and assessment of efficacy and patient response to basic respiratory care modalities in the cardiopulmonary compromised patient population. Includes such therapeutic modalities as: 02/gas therapy, aerosol and humidity therapy, bronchial hygiene, and hyperinflation therapy. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Chemistry 121; Mathematics 118, English 101; Biology 116 and 120.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### **RESPIRATORY THERAPY 115**

#### Cardiopulmonary/Renal Anatomy and Physiology

Study of cardiac, pulmonary and renal structure and function with emphasis on physiology as applied to the practice of respiratory care. This includes the integrated functions of ventilation, respiration, gas transport and acid base regulation. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 114, 116, 117, 118, 119 or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.



## **RESPIRATORY THERAPY 116**

## **Patient Assessment**

Introduction to the role of a respiratory therapist in the hospital setting as a member of a healthcare team. Includes professional behavior, ethics, legalities, communications, medical terminology, medical charts and cardiopulmonary assessment. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Chemistry 121; Mathematics 118, English 101; Biology 116 and 120. 2 LECTURE HOURS. 2 CREDIT HOURS.



## **RESPIRATORY THERAPY 117**

## **Respiratory Pharmacology**

Anatomy and physiology of the nervous system as applied to the pharmacodynamics of bronchodilation and the effects various drugs have on the cardiovascular and pulmonary systems is emphasized. Indications, dosages, routes of administration, contraindications, adverse effects and dose calculations will be discussed. Clinical simulation, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Chemistry 121; Mathematics 118, English 101; Biology 116 and 120. 1 LECTURE HOUR. 1 CREDIT HOUR.



## **RESPIRATORY THERAPY 118**

## **Respiratory Microbiology**

Applied microbiology and infection control practices as related to the hospital environment and respiratory care modalities and equipment. OSHA, JCAHO infection control practices including screening tests and risk factors as well as understanding of all hospital isolation techniques is presented. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Chemistry 121; Mathematics 118, English 101; Biology 116 and 120.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



## **RESPIRATORY THERAPY 119** Respiratory Care Lab I

Introduction to basic equipment: design, function, troubleshooting and care of respiratory therapy devices and circuitry used to deliver therapy, humidity and aerosol therapy, bronchial hygiene, hyperinflation modalities. Professionalism, communication techniques, monitoring will be practiced in conjunction with laboratory simulated hospital procedures and situations. Basic CPR certification and all proficiency testing of clinical procedures will be done. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Chemistry 121; Mathematics 118, English 101; Biology 116 and 120. 6 LAB HOURS. 3 CREDIT HOURS.

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#### **RESPIRATORY THERAPY 127**

#### **Clinical Practice I**

Introduction to the hospital setting and the set-up, maintenance and discontinuation of oxygen; aerosol and humidity therapy; intermittent modalities to include bronchial hygiene and hyperinflation therapies. Clinical simulations, tutorials and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 114, 116, 117, 118, 119 or consent of Department Chairperson. 12 LAB HOURS. 3 CREDIT HOURS.

МХ ОН

#### **RESPIRATORY THERAPY 129** Clinical Practice II

Supervised clinical course with an introduction to airway management techniques, basic ventilator care techniques, pediatric respiratory care and refinement of floor therapy skills with acute patients. Clinical simulations, tutorials and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 115, 127, 137, 139, 141 or consent of Department Chairperson.

12 LAB HOURS. 3 CREDIT HOURS.



#### **RESPIRATORY THERAPY 137** Advanced Pathology and Clinical Application

Acute and chronic respiratory and cardiac pathological processes and their associated renal complications and compensations: diagnostic testing including arterial blood gasses, basic radiographic interpretation, pulmonary function studies, interpretation of laboratory studies, treatment and prevention of disease processes. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 114, 116, 117, 118, 119 or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **RESPIRATORY THERAPY 139** Respiratory Care Lab II

Introduction to hospital specific policies and procedures, continuation of application and practice of respiratory care modalities, now applied to the critically ill patient. Emphasis on airway management, mechanical ventilators, circuitry, mechanical ventilation management and techniques. Comprehensive laboratory competency testing. Clinical cases presented as technical management corollaries. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 114, 116, 117, 118, 119 or consent of Department Chairperson 4 LAB HOURS. 2 CREDIT HOURS.



#### **RESPIRATORY THERAPY 141**

#### Ventilatory Mechanics I

Theory of basic mechanical ventilator function, methods of ventilation, modes, classification of ventilators, demonstration of basic equipment and circuitry. Airway management indications, selection of type, intubation, management assessment, hazards, extubation and troubleshooting the artificial airway will be covered. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 114, 116, 117, 118, 119 or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **RESPIRATORY THERAPY 146**

#### Ventilatory Mechanics II

Introduction to the theory of mechanical ventilation in the adult patient. Selection of ventilator parameters, commitment, maintenance, weaning. In-depth presentation, discussion, demonstration of specific adult ventilator systems, CPAP, BiPAP circuits, practice and testing. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 115, 127, 137, 139, 141 or consent of Department Chairperson. 2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **RESPIRATORY THERAPY 200**

#### **Respiratory Care Lab III**

In depth presentation, discussion, demonstration of specific pediatric/neonatal ventilator systems, CPAP circuits, practice and testing. Continuation of adult ventilator practice, practice and integration of other critical care procedures. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 129, 146, or consent of Department Chairperson.

4 LAB HOURS. 2 CREDIT HOURS.



#### **RESPIRATORY THERAPY 222**

#### **Clinical Practice III**

Supervised clinical course providing advanced airway management skills, advanced ventilator techniques and diagnostic procedures in the hospital setting. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 129, 146 or consent of Department Chairperson.

12 LAB HOURS. 3 CREDIT HOURS.



#### **RESPIRATORY THERAPY 224**

#### **Clinical Practice IV**

Supervised clinical course providing advanced airway management skills, advanced adult ventilatory techniques, neonatal respiratory procedures and advanced cardiopulmonary diagnostic procedures. Exposure to alternate sites of care. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 200, 222, 225, 227, or consent of Department Chairperson.

#### 24 LAB HOURS. 4 CREDIT HOURS.



## RESPIRATORY THERAPY 225

Age-Specific Care

Introduction to age appropriate considerations of patient education, application of therapeutic modalities and manifestations of cardiopulmonary diseases throughout the human life span. This course will also address managed care, management, patient care plans and alternate sites of care. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 129, 146, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **RESPIRATORY THERAPY 227** Critical Care Services

Advanced cardiopulmonary monitoring is presented with emphasis on ECG interpretation and hemodynamic and exhaled gas monitoring and therapeutic interventions. Chest radiograph, CT and MRI interpretation will be introduced. Pharmacological agents that affect the cardiopulmonary, renal, and acid base regulating systems; paralyzing agents, analgesics, sedatives, administration safety, dose ranges, monitoring response to and basic fluid and electrolyte balance will be presented. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 129, 146, or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### **RESPIRATORY THERAPY 230**

#### **Advanced Cardiopulmonary Monitoring**

Case studies with PFTs, blood gases, hemodynamic profiles, ECGs and related diagnostic testing will be presented along with related pathophysiological changes of cardiopulmonary diseases. Advanced adult, pediatric, neonatal cardiopulmonary life support will be covered. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 200, 222, 225, 227, or consent of Department Chairperson.





#### RESPIRATORY THERAPY 250

#### **Cardiopulmonary Rehabilitation Home Care**

Care of patients with chronic cardiopulmonary disease in a sub-acute setting and in their homes. Long term therapeutic prescriptions, equipment selection, cleaning and asepsis of equipment in the non-acute care setting. Pulmonary rehabilitation goals and programs presented along with adjunct exercises, equipment and assistive devices. Clinical simulations, tutorials, and Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 200, 222, 225, 227, or consent of Department Chairperson. **1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### **RESPIRATORY THERAPY 260** Advanced Specialty Topics

Respiratory care research topics presented, ethics and board examination preparation, computer-assisted clinical simulations along with branching logic, latent image practice and mock certification and registry examination preparation and practice. Resume, portfolio and job interview preparation will also be included. Clinical simulations, tutorials, and writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Respiratory Care 200, 222, 225, 227, or consent of Department Chairperson.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### SOCIAL SCIENCE

#### **SOCIAL SCIENCE 103**

#### Introduction to Applied Social Science

General introduction to influence of modern scientific technology on the life of the worker, the study of social problems that will affect lives of working people in the years to come, and contribution of social science to development of social participation skills necessary for vocational and marital success. Applicable for A.A.S. degree only. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SCIENCE 104**

#### **Special Topics in the Social Sciences**

This course focuses upon selected topics in social sciences. The course is offered to students interested in the characteristics of group life, the effect of the local action on the global scene, and the interrelationships between society culture, and the individual. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability. ARC: 1 time.

Prerequisite(s): Consent of Department Chairperson/Coordinator.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SCIENCE 110

Introduction to Global Studies

To prepare students for an increasingly interdependent world, this multi-disciplinary core course cultivates an active conversation about the interconnected global context of our lives. The class examines shared and divergent histories, politics, aesthetics, communication practices, cultures, and economies, as well as human impact on the environment by paying close attention to contradictions among ethnic and religious identities, strong national affiliations, and the fluidity of nationstate borders. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SCIENCE 115**

#### Introduction to Health Education and Prevention

This course is the first requirement of the HIV/STI Prevention Education Basic Certificate Program. It is designed to provide an introduction to the fundamentals of community health education for prevention, early detection, self-care and recovery, particularly with regard to substance abuse. The course surveys health education and outreach programs for diverse populations and communities. It looks at the methods of evaluation to determine the effectiveness of various programs, It examines prevention strategies that attempt to motivate positive behavioral changes and the assessment, planning, and evaluation of interventions. It covers the teacher and application of important life skills. The course also provides an overview of management healthcare systems. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SCIENCE 116 HIV/STI Prevention Education**

This course is one of the requirements of the HIV/STI Prevention Education Basic Certificate Program. It is designed to provide an introduction to the fundamentals of HIV/STI peer prevention education. It surveys prevention education and related outreach programs geared to diverse populations and communities. It examines methods of assessment to determine the health needs of different communities as well as methods of evaluation as applied to health programs to determine their effectiveness. The course also covers the areas of HIV/AIDS, other STIs, safer sex, and harm reduction. It explores specific communities and neighborhoods to discover factors that have a positive or negative impact on both individual and community health, particularly those that foster sexual risk-taking behavior. This course is designed for those working or interested in community health fields. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Science 115.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SCIENCE 117**

#### **HIV/STI and Special Populations**

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed as an introduction to the concerns and issues of HIV/STI and their effect on special populations. The course examines related needs and problems of those specific populations, which includes women and children, adolescents and young adults, minorities, men who have sex with men (MSM), the disabled, and those who are incarcerated. It explores the health needs of the different communities, particularly with regard to prevention, testing, treatment, substance abuse, and care efforts. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Science 115.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

(wr)

#### **SOCIAL SCIENCE 201 Group Facilitation**

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed to provide an introduction to both theoretical concepts and practical applications of group dynamics and facilitation skills for people working in the fields of addiction counseling and HIV/STI prevention education. The course explores the basic areas of goal setting, problem-solving skills, effective group facilitation concepts, dealing with different personalities, handling conflict, and reaching consensus. This course includes observation and participation in group dynamics, group membership, and group facilitation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE

#### **SOCIAL SERVICE 101** Introduction to Social Work

Concepts, principles, and processes encountered by social service workers; questions of motivation, acceptance, attitude, techniques of listening and interviewing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, or Grade of C or better in English 98, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 102

#### Introduction to Gerontology

An overview of elder issues including the social, psychological and physical aspects of the aging process. The course will also examine the economic and social impact of the growing elderly population on US society and the global community and will explore career opportunities in this expanding field. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 103 Aging and Social Policy

A study of government policy to familiarize students with programs at the federal, state and local levels that address elder issues from housing to healthcare to employment to nutrition and recreation. Students will learn how public policy is created, the role of elder advocacy groups in shaping legislative agendas and issues affecting current and future government programs such as Medicare and Medicaid. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 104**

#### **Special Topics in Aging**

A study of current issues in aging are examined. Topics such as the economics of aging, sexually transmitted diseases, ageism, quality of life, and support services for those aging in place (at home) will be explored from a holistic approach to problem identification and basic intervention strategies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 105**

#### **Physiology of Aging**

An exploration of the basic changes that occur in the physical make-up of men and women as a result of the aging process. Discussion will include the causes and effects of disease and debility, as well as health assessment measures, healthcare options and health maintenance strategies. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 106

#### Aging and the Family

An introduction to family theory as found in significant sociological traditions. The course will discuss the effect of the aging process on extended and nuclear families, the changing roles of parent and child, the family stresses and rewards of care giving, the role of aging siblings, relationships between the generations and the financial and psychological impact of caring for the frail elder in the family setting. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SOCIAL SERVICE 107

#### Aging and Leisure

An exploration of the opportunities that are available to the elderly from the well years to the frail years, for personal enrichment, intellectual development, volunteering, health improvement, travel, spiritual growth and second careers. Students will learn the ways in which a majority of an individuals older years may be a time of great opportunities for growth, development and service. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 109

**Report Writing for Social Service Aides** 

Introduction to records, reports, and forms required in social agencies; report writing and record keeping. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101 and Social Service 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 110**

#### **Introduction to Property Management**

This survey course is the first of the required courses in the Property Management/ Desk Clerk program. It provides an overview of the different types of multi-family affordable and supportive housing, including housing linked with social services. This course profiles the different populations living in affordable and supportive housing and describes the role of supportive service personnel in aiding at-risk tenants. This course also explores the different housing programs that pay for construction, rehabilitation and operating subsidies at the federal, state, and local levels. It covers applicable legal concerns, such as the Fair Housing Law. It also introduces the major functions of property management including specific responsibilities, usual practices, legal functions and issues, and confidentiality and other ethical concerns. In addition, specific vocabulary to the field is introduced. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SOCIAL SERVICE 111

#### **Tenant Services and Communications**

This course is one of the requirements in the Property Management/Desk Clerk program. It is designed to provide an overview and practice of the interpersonal skills needed for a clerical position in a supportive/affordable housing setting. The course provides ways to understand as well as interact effectively with the different populations living in supportive housing. It explores the areas of front desk cordiality, problem identification and problem-solving, as well as the common procedures for oral and written communications and complaints. The course also provides common procedures for referring tenants for social services. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 110.

#### 2 LECTURE HOURS. 2 CREDIT HOURS.



SOCIAL SERVICE 112

#### **Desk Clerk Operations**

This course is one of the requirements in the Property Management/Desk Clerk program. It provides an overview of desk clerk operations, procedures and security. It explores the role of the front desk and the responsibilities of the position in affordable and supportive housing. It covers the areas of front desk policies, safety and security, interaction with externals agencies and authorities, interaction with tenants and non-tenants, confidentiality issues, and maintenance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 110.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 

## (WR)

#### **SOCIAL SERVICE 113**

#### **Property Management Clerk Internship**

This course is the final requirement in the Property Management/Desk Clerk program. It is designed to enable students to combine classroom training with practical property management clerk work experience through on the job training in a supportive or affordable housing project setting. This course covers legal, ethical, and performance concerns, as well as interviewing and job placement skills. Periodic seminars are held to discuss experiences, concerns, and topical questions. Students are required to keep a journal and prepare a portfolio, which will include a resume, letters of recommendation, and other pertinent materials. A minimum number of hours of on-site time, determined by the numbers of credit hours undertaken, is required for this course. Internship placement must be approved by the Department Chairperson and Program Coordinator. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 110, 111, and 112, and consent of Department Chairperson.

1 LECTURE HOUR AND 10 LAB HOURS. 1-3 CREDIT HOURS.



#### **SOCIAL SERVICE 114**

Marketing and Leasing

This course is one of the requirements in the Property Management/Leasing Specialist program. It is designed to provide an overview of the major functions and practices of the marketing and leasing specialist in a supportive housing environment. This course explores the specific responsibilities, effective communication skills, usual practices, legal functions and issues, as well as applicable ethical concerns facing leasing specialists in a supportive housing setting. The course examines the characteristics of the different populations living in affordable and supportive housing and the various supportive funding streams. The course also covers compliance with government policies and procedures and the specific laws pertaining to supportive housing.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 115 Finance and Accounting

This course is one of the requirements in the Property Management/Leasing Specialist program. It is designed to provide an overview of the areas of income and expenses for a supportive housing residence, as well as budgeting. It reviews general business math skills necessary for keeping track of income and expenses. Different programs which subsidize rentals are examined as are low income subsidy regulations. The course includes how to calculate rents under different programs and how to handle rent disputes. It introduces spreadsheets and financial reports. It also examines property management software such as Excel and Yardi, how to keep track of income and expenses, and how to compute accurate numbers. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS, 2 CREDIT HOURS,



#### **SOCIAL SERVICE 116**

#### Maintenance and Risk Management

This course is one of the requirements of the Property Management/Leasing Specialist program. It is designed to provide an overview of the major functions and responsibilities involved in property management maintenance and risk management in a supportive housing environment. The course explores building operating systems, maintenance standards and compliance, enforcement, securing of vendor bids, as well as fire, life safety and other inspections. It also covers the areas of insurance, keeping necessary computer data, and maintaining professional relationships with others. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 114.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

(wr)

#### **SOCIAL SERVICE 117**

#### **Property Management Leasing Internship**

This course is the final requirement for the Property Management/Leasing Specialist program. It is designed to enable students to combine classroom training with work experience through on the job training in a supportive or affordable housing project setting. This course covers legal, ethical and performance concerns, as well as interviewing and job placement skills. Periodic seminars are held to discuss experiences, concerns and topical questions. Students are required to keep a journal and prepare a portfolio which will include a resume, letters or recommendation, and other pertinent materials. A minimum number of 75 hours of on-site time, determined by the number of credit hours undertaken, is required for this course. Internship placement must be approved by the Department Chairperson or Program Coordinator. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 114, 115 and 116, and consent of Department Chairperson.

1 LECTURE HOUR AND 10 LAB HOURS, 1-3 CREDIT HOURS,



#### **SOCIAL SERVICE 118**

#### Introduction to Health Education and Prevention

This course is the first requirement of the HIV/STI Prevention Education Basic Certificate Program. It is designed to provide an introduction to the fundamentals of community health education for prevention, early detection, self-care and recovery, particularly with regard to substance abuse. The course surveys health education and outreach programs for diverse populations and communities. It looks at the methods of evaluation to determine the effectiveness of various programs, It examines prevention strategies that attempt to motivate positive behavioral changes and the assessment, planning, and evaluation of interventions. It covers the teacher and application of important life skills. The course also provides an overview of management healthcare systems. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 119 HIV/STI Prevention Education

This course is one of the requirements of the HIV/STI Prevention Education Basic Certificate Program. It is designed to provide an introduction to the fundamentals of HIV/STI peer prevention education. It surveys prevention education and related outreach programs geared to diverse populations and communities. It examines methods of assessment to determine the health needs of different communities as well as methods of evaluation as applied to health programs to determine their effectiveness. The course also covers the areas of HIV/AIDS, other STIs, safer sex, and harm reduction. It explores specific communities and neighborhoods to discover factors that have a positive or negative impact on both individual and community health, particularly those that foster sexual risk-taking behavior. This course is designed for those working or interested in community health fields. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 118.

3 LECTURE HOURS. 3 CREDIT HOURS.

#### WR

#### SOCIAL SERVICE 120

#### **HIV/STI and Special Populations**

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed as an introduction to the concerns and issues of HIV/STI and their effect on special populations. The course examines related needs and problems of those specific populations, which includes women and children, adolescents and young adults, minorities, men who have sex with men (MSM), the disabled, and those who are incarcerated. It explores the health needs of the different communities, particularly with regard to prevention, testing, treatment, substance abuse, and care efforts. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 118.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 121 The ABC's of STI's

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed to provide an overview of the more common sexually transmitted diseases (other than HIV) and the effect they have on different populations. This course covers the basic epidemiology of these diseases, their transmission, diagnosis and treatment options, and their various stages. It also explores the possibility of contagion and level of incidence, short and long term effects, as well as examines important issues and problems in harm reduction, prevention, and support. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 119. 3 LECTURE HOURS, 3 CREDIT HOURS,



#### SOCIAL SERVICE 122 HIV/STI and GLBT Health

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed to provide an overview of the state of health for gay, lesbian, bi-sexual, and transgender populations. It examines common behavior and trends of these populations as well as related needs and problems, such as accessing health and social services. It explores the health needs of the different communities, particularly in the areas of prevention, testing, treatment, and care. It also analyzes the impact of HIV/AIDS, STIs, and other diseases on these communities. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 121.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 123 HIV/STI Outreach Skills

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed to provide advanced education and training in HIV/STI risk reduction. It prepares students to conduct peer education and risk reduction counseling in community-based outreach settings. It explores contemporary concerns, as well as recent findings regarding the transmission and risk reduction of STIs. The course analyzes issues relating to gender, sexual orientation, culture, and ethnicity in order to better prepare students to counsel multi-cultural groups. The course covers training in careers in public health education. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 119 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 124**

#### CASE Management/Individual Intervention

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed to provide an introduction to the areas of the case management process in health advising. It focuses on skills development in the areas of communication skills and techniques for client-centered health advising for different populations, particularly those dealing with HIV/AIDS. It covers the required ethical documentation of case managers. It also covers intake interviewing, data collection and documentation, and effective use of referrals. The course helps students develop the skills necessary to work effectively in HIV/STI prevention health agencies, including the ability to correctly fill in required forms. It also explores strategies for managing cases and encouraging client change in diverse populations. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 123.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 201**

#### **Principles of Social Work Practice**

Introduction to social welfare resources of the community; discussion of methods to help persons make use of these resources, including analysis of the helping relationship, role of non-professional worker, problem-solving approach to individual, family, and community problems. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 





#### **SOCIAL SERVICE 202**

#### **Aging and Human Services**

This course explores the history of gerontological social work and the methods employed in providing the greatest benefits of human services to the elderly population. Students will learn the practical principles of case management from interviewing to evaluation and become familiar with the characteristics of the service settings in which they will encounter the elderly in the role of Gerontology Specialist. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102 and Social Service 106, or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **SOCIAL SERVICE 203**

#### Inter Communication with the Elderly

This course is a study of the basic principles of communication as employed in counseling and human services settings. It will emphasize the development of the listening, speaking, behavioral and attitudinal skills that are required by gerontology professionals at the level of social work assistant. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102 and Social Service 106, or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **SOCIAL SERVICE 204**

#### **Cross-Culture Studies in Gerontology**

A comparative study of aging in a variety of cultures from traditional to modern. Students will learn that the attitude of a culture towards its aging population is based on the complex set of interrelationships between its social, religious and historical traditions. The course will examine Native American, traditional Chinese, modern European, dominant and minority American cultures and their attitudes toward the elderly and how these attitudes are crystallized into social policy. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102, or consent of Department Chairperson.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **SOCIAL SERVICE 205**

#### **Ethical Issues in Aging**

As the population of those fifty (50) and above increases, so do the emerging issues relative to ethics. Issues such as elder abuse, dementia, intergeneration equity, guardianship and living wills, decision making, and personal safety will be explored in the context of preparation for those who work with the targeted population. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 206

#### Human Development and Aging

This course builds on human growth and development, specifically designed to focus on development tasks relative to those who are fifty (50) and beyond. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 207** Group Facilitation

This course is one of the requirements of the HIV/STI Prevention Education Certificate Program. It is designed to provide an introduction to both theoretical concepts and practical applications of group dynamics and facilitation skills for people working in the fields of addiction counseling and HIV/STI prevention education. The course explores the basic areas of goal setting, problem-solving skills, effective group facilitation concepts, dealing with different personalities. handling conflict, and reaching consensus. This course includes observation and participation in group dynamics, group membership, and group facilitation. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 212**

Introduction to Group Process

For persons who work with groups; parent groups, community action programs, recreation programs, church groups, or in child care programs. How individuals function as group members; role of the leader; encouraging participation and group action for achieving group goals. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SOCIAL SERVICE 213**

#### **Advanced Group Process**

For students who desire to develop skill in working with groups; discussion of techniques for working most effectively with different types of groups. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 212.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### **SOCIAL SERVICE 215 Social Problems and Social Action I**

For group workers, community leaders, and teachers. Problems of urbanization, industrialization, cultural and educational deprivation, juvenile delinquency, and techniques and programs organized to combat these problems. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS, 3 CREDIT HOURS,** 



#### **SOCIAL SERVICE 228**

#### Methodology for Social Work

Principles of casework applied to work with families; community resources available to meet economic, emotional, and health needs, and techniques for implementing referrals for such services. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 and 102, and Social Service 101 and 201, or consent of Department Chairperson.



#### SOCIAL SERVICE 229

#### **Social Service Practicum**

Field work placement in a family welfare agency 20 hours per week, 8 or 16 weeks; 2-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 228 and Child Development 107, or consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



#### **SOCIAL SERVICE 248**

#### **Principles of Youth and Group Work**

Social development and behavior of young people and other adults in all group settings; church groups, street gangs, tutoring programs, recreational groups, YMCA's and YWCA's settlement or delinquency prevention programs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 102 and Social Service 201 and Social Service 213 and Social Service 215), or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SOCIAL SERVICE 249

#### **Practicum in Youth Work**

Field work assignment in youth agency 20 hours per week, 8 or 16 weeks; 2-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 101 and 102, and Social Service 101 and 248, or consent of Department Chairperson.

2 LECTURE HOURS AND 20 LAB HOURS. 6 CREDIT HOURS.



#### **SOCIAL SERVICE 250**

#### Practicum I

This course combines classroom training with field placement at a community agency or institution serving older persons. Students apply learning about the organization and management of aging services, explore community resources, demonstrate work habits, assess their attitudes and career skills in gerontology, and relate current aging research to practice. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 102 and 105, and Psychology 222.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



#### **SOCIAL SERVICE 251**

#### Practicum II

This capstone course provides a review of gerontology course work, field placement experience at a human services agency or institution serving older persons, advanced classroom training in practice concepts related to service delivery to older adults, an guidance in producing a final project that will summarize students gerontological course work. Writing assignment, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 250.

2 LECTURE HOURS AND 5 LAB HOURS. 3 CREDIT HOURS.



#### SOCIAL SERVICE 252

#### **Nursing Home Administration**

This course introduces students to administrative practices in long-term care facilities including organization, financial management, staffing, community relations, managing the physical plant, in-service training, and alternatives to institutionalization. In preparation for taking the Nursing Home Administrator licensing exam, students will also learn about community health systems, auxiliary agencies and programs, chronic diseases and infirmities, the aging process and the care of the aged, and related local, state, and federal legislation.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 253

#### Accounting for Long Term Care

This course is designed to give students, who will be essentially non-financial managers, the financial knowledge needed to perform the duties of a healthcare administrator in the long-term care setting.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **SOCIAL SERVICE 258**

#### **Principles of Practice in Community Organization**

For students who work with community action programs, community planning, or neighborhood improvement. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Child Development 102, and Social Service 101, 201, and 213, or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SOCIAL SERVICE 259

#### **Practicum in Community Service**

Field work placement in a community service agency plus weekly seminars. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Social Service 258, or consent of Department Chairperson. 2 lecture hours and 20 lab hours.

6 CREDIT HOURS.

#### SOCIOLOGY

#### SOCIOLOGY 110

#### **Religion and Society**

Sociological investigation into relationship between religious values and forms of social organization. Concentration on contemporary religious movements and includes examples from Christian, Jewish, Islamic and non-western religions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.





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# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### **SOCIOLOGY 210**

#### **Diverse Cultures/Global Age**

Examines the issues of diversity and prepares students to speak and act with sensitivity and awareness of others. Students will gain proficiency in global events and their implications; students will learn how to interact with international visitors through the use of role playing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SPANISH

#### **SPANISH 101**

#### **First Course Spanish**

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course. *Prerequisite(s): Placement Exam.* 

4 LECTURE HOURS. 4 CREDIT HOURS.



#### SPANISH 102

#### Second Course Spanish

Continuation of Spanish 101. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Placement test or Grade of C or better in Spanish 101.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### SPANISH 103

#### **Third Course Spanish**

Review and development of basic language skills, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Spanish 102; or Placement Exam and Interview with World Language Faculty

#### 4 LECTURE HOURS. 4 CREDIT HOURS.

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#### **SPANISH 192**

#### Survival Span for Law Enforcement Officers

Provides trans-cultural training for non-Spanish speaking police officers. Emphasis is on enhancing quality communications skills when aiding victims and contact with offenders. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **SPANISH 199**

#### Study Abroad: Immersion Salamanca, Spain

Utilizing a collaborative cohort model, this course prepares students to fully participate in, and benefit from, the Spanish summer language and cultural immersion study abroad program. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Spanish 198 with a grade of C or better.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### SPEECH

#### **SPEECH 100**

#### Introduction to Oral Communication

Study of process of communication as it applies to interpersonal, group, or mass communication; emphasis on practical applications of communications in our lives; recommended for students in occupational and general studies programs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SPEECH 102

#### **Public Speaking**

Advanced theory and practice of oral communication in public speaking in speakeraudience situation; discussion of psychological effects of speech techniques, choice of words, attitudes, and structuring; role of speech in gaining consensus in a confrontation of the rhetoric of agitation and control; studies of outside speakers from personal viewing, television viewing, and examination of speech texts, argumentative techniques used in the persuasive speech. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Speech 101, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SPEECH 104

#### **Group Communication**

Principles and theories involved in discussion techniques; participation in various kinds of discussion groups to prepare student for leadership roles in community, business, and professional groups. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Speech 101, or consent of Department Chairperson.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SPEECH 106

#### **Human Communications**

Types of verbal and nonverbal communication, oral and visual, as transmission of data and information to elicit a response; includes methods of encoding information for communication, history, social consequences of modern communication, both verbal and visual. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SPEECH 112

#### Introduction to Oral Communication

Process of communication applied to interpersonal group and mass communication; emphasis on practical application of communication in our daily lives. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



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#### SPEECH 135

#### **Speech Projects**

A speech project performed outside of the classroom as an activity. Writing assignments, as appropriate to the discipline, are part of the course. <u>Allowed</u> <u>Repeatable Course:</u> Not more than an accumulated two credit hours will be counted towards graduation. **ARC: 2 times.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.

3 LAB HOURS. 1 CREDIT HOUR.



#### SPEECH 140 Speech Clinic

For students with problems in voice or diction. Huskiness, lack of vocal melody, nasality, slovenly diction, sound substitution, lack of ease in precise articulation of consonant and vowel sounds are treated. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### SPEECH 143

#### **Training the Speaking Voice**

Improvement and development of an individuals voice, speech, pitch, volume, and overall articulation through use of phonetics of American English. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### SPEECH 144

#### **Oral Reading and Interpretation**

Study of communication skills required for effective oral reading; experience in oral interpretation of representative examples from prose, poetry, and drama. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Speech 101, or consent of Department Chairperson.

2-3 LECTURE HOURS. 2-3 CREDIT HOURS.



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#### **SPEECH 145**

#### **Radio and Television**

Historical development of broadcasting and analysis of existing programs; objectives of radio and television, study of program types, acceptable standards for broadcasting, and career opportunities. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SPEECH 160

#### **Business and Professional Speech**

Speech techniques used in selling, administrative reporting, public relations, program speaking, conference procedures, and other industrial and professional presentations. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### SPEECH 202

#### Interpersonal Communication

Study of leadership, group process, and interpersonal relations in the small group, conference, and public forum. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



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#### SPEECH 205

#### **Family Communication**

A study of the family as a communication system and the use of principles of healthy communication within a family context. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 101 or consent of Department Chairperson.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### SPEECH 206

#### Argumentation

Role of debate in a democratic society; principles of investigation and analysis of issues, types and tests of evidence and reasoning as applied to public questions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Speech 101, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

#### SPEECH 243

#### **Speech for Teachers**

Correcting common errors of articulation, identifying and directing remedial cases, reading aloud with interest, controlling and directing simple classroom discussions, developing good speaking voices, and selecting and presenting assembly programs. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Speech 101, or consent of Department Chairperson. 3 LECTURE HOURS. 3 CREDIT HOURS.

#### SURGICAL TECHNOLOGY

#### **SURGICAL TECHNOLOGY 111**

Introduction to Surgical Technology

This course is designed to present the basic concepts and principles for developing skill competencies required to assist in surgery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SURGICAL TECHNOLOGY 112

#### **Preparation for Surgery**

This course acquaints students with skills necessary to help prepare the operating room for surgery. Emphasis is placed on psychosocial and physical needs of the patient requiring surgery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.



#### SURGICAL TECHNOLOGY 113

#### **Special Patient Care**

This course prepares students to acquire skills necessary to take care of unique patients, emphasis is placed on ambulatory, geriatric, pediatric trauma surgeries and contemporary issues. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### SURGICAL TECHNOLOGY 114 Surgical Interventions I

# The clinical portion of the course allows students to put into action the theory

acquired in Surgical Technology 112. Emphasis is placed on reading a preference card, acquiring items needed for the case, hand washing, OSHA and CDC guidelines, don sterile gowns and gloves for self and others, ORSPD, back table set-up, and getting to their field successfully. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Surgical Technology 111, 112, and 113, and Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 115

#### **Surgical Intervention II**

A study of surgical procedures with emphasis on surgery of the liver, biliary tract pancreas and spleen thyroid and parathyroid, breast surgery, ophthalmic, otology surgeries. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Surgical Technology 111, 112, and 113 and Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 116

Surgical Intervention III

A study of surgical procedures with emphasis on laryngologic, head and neck orthopedic, neurosurgery, plastic and reconstructive surgery. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Surgical Technology 111, 112, and 113 and Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 117

#### Surgical Pharmacology

Introduces the scientific principles of compound and chemicals as they are used in the surgical setting. This course defines the rationale for use of specific drugs, and their side effects. It renders students competent in safe handling and labeling medications. Helps student measure and mix mediations given to them by the nurse or physician to be used on the field. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 200 Application Aseptic Techniques

The clinical portion of the course allows students to put into action the theory acquired in previous courses. Hand washing, gowning self and other, gloving self and other, establishing and maintaining a sterile field, getting to the field

successfully. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Admission to the Surgical Technology Program/Plan 267 or Surgical Technology Program/Plan 268.

15 LAB HOURS. 3 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 211 Surgical Intervention IV

A study of surgical procedures with emphasis on thoracic, vascular and cardiac surgery. There is also emphasis placed on resume writing, job placement, interviewing and negotiating in the job market. Review for the national exam. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Surgical Technology 200.

2 LECTURE HOURS AND 1 LAB HOUR. 2 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 212 Clinical Practicum I

A clinical course designed to provide opportunities for students to more fully develop proficiency in the skills required of an entry level Surgical Technologist. Current issues in surgery, resume writing, interviewing and negotiating in the job market. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Surgical Technology 211. 15 LAB HOURS .5 CREDIT HOURS.

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#### SURGICAL TECHNOLOGY 213 Clinical Practicum II

After successful completion of all Surgical Technology courses, a forum for the discussion of salient issues related to the practice of surgery as they affect the Surgical Technologist. Preparation for employment, as well as review of comprehensive exam. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Successful completion of all Surgical Technology courses.

24 LAB HOURS. 8 CREDIT HOURS.



#### SURGICAL TECHNOLOGY 214

#### **Obstetrics/Gynecologic Technology**

This course is designed to present the basic concepts and principles for developing skills competencies required for assisting in surgery. The course will offer knowledge in aseptic techniques, scrubbing, gowning and gloving the female anatomy, proper positioning, patient safety, skin preparation instrumentation, supplies and drugs, equipment, and the surgical interventions. Writing assignments, as appropriate to the discipline, are part of the course. The lab portion of the course allows students to practice the theory offered.

Prerequisite(s): Grade of C or better in English 101 and consent of Department Chairperson and Concurrent enrollment in Surgical Technology 215.



#### **SURGICAL TECHNOLOGY 215**

#### **Obstetrics/Gynecologic Technology**

This course is designed to present the basic concepts and principles for developing skills competencies required for assisting in surgery. The course will offer knowledge and application in aseptic techniques, scrubbing, gowning and gloving the female anatomy, proper positioning, patient safety, skin preparation instrumentation, supplies and drugs, equipment, and the surgical interventions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in English 101 and consent of Department Chairperson and concurrent enrollment in Surgical Technology 214.

12 LAB HOURS. 4 CREDIT HOURS.

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#### **SURGICAL TECHNOLOGY 216**

#### **Sterile Processing Technology**

This course is designed to present the basic concepts and principles for developing skills and competencies required for infection prevention and control in the sterile processing department in a healthcare facility. This course will offer knowledge in cleaning, disinfecting, decontamination, sterilization, Standard precautions, and Universal precautions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Completion of English Composition 101 and consent of program director; and co-enrollment in Sterile Processing Tech Laboratory 217 with Grade of C or better.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

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#### SURGICAL TECHNOLOGY 217

#### Sterile Processing Technology Lab

This course is designed to provide clinical training and the application of principles required for infection prevention and control in the sterile processing department in a healthcare facility. This course will offer clinical experience in cleaning, disinfecting, decontamination, sterilization, Standard precautions, and Universal precautions. Writing assignments, as appropriate to the discipline,

Prerequisite(s): Completion of English Composition 101 and consent of program director; and co-enrollment in Sterile Processing Tech Laboratory 0216 with a Grade of C or better.

12 LAB HOURS. 4 CREDIT HOURS.

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#### **TECHNOLOGY (330)**

#### **TECHNOLOGY 577** Reading for Information

This course is designed to provide the skills necessary to analyze reading materials effectively. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



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#### **TECHNOLOGY (332)**

#### TECHNOLOGY 400 Scaffold Safety

#### General safety guidelines for constructing and dismantling scaffolds, including

a review of local municipal and OSHA codes, rules and regulations. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time. 1 LECTURE HOUR. 1 CREDIT HOUR.** 

1 LECTURE HOUR. 1 CREDIT HOU

#### **TECHNOLOGY 401**

#### Introduction to Labor and Trade Occupations

This course will provide students with information about trades and crafts related training programs, unions, and working conditions. Writing assignments, as appropriate to the discipline, are part of the course.

1-2 LECTURE HOURS. 1-2 CREDIT HOURS.



#### **TECHNOLOGY 406**

#### **Construction Materials/Methods**

This course will provide students with the information needed on construction materials and methods used in the construction of buildings. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### TECHNOLOGY 407

#### **Quality Abatement Supervisor**

This course emphasizes the supervisory responsibilities required to safely remove hazardous materials as asbestos and lead. The course will provide instruction on potential health effects, personal protective equipment and information on such hazardous materials as asbestos, lead and mold; removal practices and procedures and other related safety and health concerns. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### **TECHNOLOGY 408** Environmental Safety Worker

This course is designed to provide students with the general knowledge for environment safety workers. It fulfills OSHA's requirements to perform class I and II work. Students will receive instruction on the potential health effects, personal protective equipment, background information on such hazardous materials as asbestos, lead, and mold; removal practices and procedures, and other safety and health concerns. Writing assignments, as appropriate to the discipline, are part of the course.

4 LECTURE HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 409

**Construction Safety** 

This course is intended to provide students with a basic understanding of safety practices found in the construction industry. Emphasis will be placed upon those areas in construction that are most hazardous, using OSHA standards as a guide. Upon successful completion, students will be issued the OSHA construction safety and health 10-hour course completion card. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 1-3 LAB HOURS. 1-2 CREDIT HOURS.



#### TECHNOLOGY 410 Interior Construction I

This course will provide students with the opportunity to practice and master the task required for entry level carpentry positions. Writing assignments, as appropriate to the discipline, are part of the course.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### **TECHNOLOGY 411**

#### Interior Construction II

This course will provide students the opportunity to practice and master the installation and the finishing techniques of interior carpentry, which are required for entry-level employment as a carpentry apprentice. Particular attention will be given to the installation of finish trim, doors, windows, flooring, hardware, ceilings, counters, cabinets and the finishing of woodwork and trim. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### **TECHNOLOGY 416**

**Exterior Construction I** 

This course will present material and methods used in various types of concrete forming for building construction. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 417

#### **Exterior Construction II**

This course will focus on rough framing and exterior walls, stairs, porches, decks, roofs and dormers. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 418

#### **Exterior Construction III**

This course focus in on installation of banisters, fascia, siding, windows, doors, screens, gutters, downspouts, roofing materials, and other exterior trim. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### **TECHNOLOGY 419**

#### **Building Maintenance Mathematics**

Basic principles of math with application relative to building maintenance and repair. Course content include: fractions, decimals, percents, measurements, ratios and proportions. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### **TECHNOLOGY 420-1**

#### **Carpentry Maintenance**

Basic carpentry skills used in building maintenance and repair. Course content includes: tools, safety, materials, doors, windows, walls, ceiling, and interior trim. Writing assignments, as appropriate to the discipline, are part of the course. **1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### TECHNOLOGY 421-1

#### **Electrical Maintenance**

Basic electrical skills used in building maintenance and repair. Course content includes: troubleshooting, testing, repairing, and replacing faulty devices and controls. Use of electric test meters and devices will also be included. Writing assignments, as appropriate to the discipline, are part of the course.

#### 1 LECTURE HOUR. 1 CREDIT HOUR.



#### **TECHNOLOGY 422-1** Plumbing Maintenance

Basic plumbing skills used in building maintenance and repair. Course content includes: troubleshooting, repairing, and replacing faulty plumbing and fixtures. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



#### **TECHNOLOGY 424**

#### **Drywall and Interior Wood Trim**

This course is designed to provide students with the basic fundamentals of how to install drywall, apply tape and joint compound, sand to a smooth surface, as well as, install wood trim to baseboards, windows, and doors. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 425

#### Window and Door Installation

This course is designed to provide students with the knowledge and skills required to install windows and doors. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.

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#### TECHNOLOGY 426-1

#### Introduction to Concrete Masonry

This course provides an overview of concrete masonry trade, which includes the history and safety standards. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### TECHNOLOGY 427

#### **Masonry Tools and Equipment**

This course is designed to provide students with an overview of the types of tools and equipment used in the concrete masonry industry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 332 Engineering 426.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **TECHNOLOGY 428**

#### Mortar

This course is designed to introduce students to mortar applications. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 3 LAB HOURS. 3 CREDIT HOURS.



#### **TECHNOLOGY 429**

#### **Basic Mathematics and Specifications**

This course is designee to teach basic applications of mathematics pertinent to the trade. Emphasis will be placed on actual measurements and calculations, different types of specifications used in the building industry as related to the trade. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



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#### **TECHNOLOGY 430**

#### **Masonary Installations Process**

This course is designed to provide students the practical skills required to install masonry units. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 332 Engineering 426-1.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### **TECHNOLOGY 431**

#### **Specifications and Building Code**

This course will enable students to adhere to established local codes and laws governing construction and rehabilitation of buildings; measure and estimate costs of labor, time and materials; develop written proposals for specific projects. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **TECHNOLOGY 432**

#### **Basic Arc Welding**

In this course, students will concentrate and master basic welding skills and techniques. An overview of the safety rules and procedures will also be provided. Writing assignments, as appropriate to the discipline, are part of the course.

#### 3 LAB HOURS. 1 CREDIT HOUR.

## **TECHNOLOGY 434**

#### Introduction to Plumbing

This course is designed to provide an overview of the plumbing trade which includes the history and safety and sanitation procedures. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.

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#### TECHNOLOGY 435

#### **Plumbing Tools and Equipment**

This course is designed to provide students with an overview of the types of tools and equipment used in the plumbing trades. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **TECHNOLOGY 436**

#### Plumbing Codes

This course is designed to introduce students to the regulations of Illinois Department of Public Health. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 1 CREDIT HOUR.



TECHNOLOGY 437 Basic Plumbing Related Mathematics 1 LECTURE HOUR. 1 CREDIT HOUR.



#### **TECHNOLOGY 438**

#### Introduction to Fire Protection

This course is designed to provide an overview of the fire protection and sprinkler trade. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### TECHNOLOGY 439

#### **Home Plumbing System**

This course is designed to provide an overview of the plumbing systems within a home. Those systems include: waste, vent and water piping. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.

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#### **TECHNOLOGY 441**

#### **Flooring/Floor Covering**

This course will instruct students in safety precautions for working with adhesives and mastic; safety operation of equipment, and installation of carpeting/padding, as well as the replacement of damaged tiles. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR. 2 CREDIT HOURS.



#### **TECHNOLOGY 332 442**

#### Introduction to Bricklaying

This course is designed to provide an overview of the bricklaying trade, which includes its history and safety standards. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TECHNOLOGY 443

#### **Bricklaying Tools and Equipment**

This course is designed to provide students with an overview of the tools and equipment used in the bricklaying industry. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 332 Engineering 442-1.



#### TECHNOLOGY 444

#### **Bricklaying Installation Procedures**

This course is designed for students to develop and practice the skills and techniques required in bricklaying, Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better 332 Engineering 442.

1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### TECHNOLOGY 445

#### Introduction to Electrical Theory

Offers a general introduction to Ohm's law, the National Electrical Code and general procedures. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



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# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### **TECHNOLOGY 446**

#### **Foundations and Flatwork**

This course is designed to teach basic forms for continuous, grade bean concrete footings including edge forms used for slabs and other structures. Theory and hands-on application are emphasized through the completion of the course. Writing assignments, as appropriate to the discipline, are part of the course.

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



#### **TECHNOLOGY 447**

#### Materials

This course is designed to describe uses of work materials and grading systems. The course will also describe various kinds metals, fasteners, and adhesive used for roadwork carpentry. Theory and hands-on applications are emphasized through the completion of the course. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### **TECHNOLOGY 448**

#### **Vocational Physical Training I**

Vocational Physical Training focus on preparing students for the physical challenges that line worker careers require. Students learn the basic of nutrition and how what we eat fuels our bodies. Students will learn proper techniques to stretch, warm up and physically train. Emphasis is given to cardiovascular training as well as leg and upper body strength. Instructors work with students to overcome physical challenges and fears for basic pole climbing. Student must earn a "C" or better in course to advance to Vocational Physical Training II. Writing assignments, as appropriate to the discipline, are part of the course.

2 LAB HOURS. 1 CREDIT HOUR.



#### **TECHNOLOGY 449**

#### **Professional Development**

This course is designed to provide students with a basic understanding of the human relations skills necessary to obtain employment and succeed in a quality work environment. This course includes resume development, cover letter writing, job searching skills, networking skills, interviewing techniques, and post-interview skills. Additionally, this course helps students succeed while on the job by exposing students to current workplace trends, team building skills, customer and co-worker relations, attitude and motivation, stress management, and financial management and planning. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

2 LECTURE HOURS. 2 CREDIT HOURS.



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#### **TECHNOLOGY 451**

#### Plumbing

This course will enable students to identify pipe fittings and standard plumbing symbols; install rough plumbing for bath and kitchen fixtures, and install water heating systems. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.

#### **TECHNOLOGY 452** Basic Electrical Theory

This class covers the theories behind basic electricity. The emphasis is on electron theory, magnetism, Ohm's Law, and circuitry. Alternating current concepts such as circuits with resistance, inductive and captive reactive circuits, and power factor correction are covered. Basic math skills are used. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### TECHNOLOGY 453

#### **Overhead Techniques and Projects I**

This first semester discusses basic electric system layout from generator to electrical user and focuses on practical tasks and working concepts associated with electrical line work. Aerial climbing is introduced and practiced; power line equipment is used. Overhead distribution line design, specifications, and construction are part of this class. In this class, students learn basic rope knots, guying and anchoring techniques, electrical connectors, hand tools, and power tools. Additionally, students learn about single phase underground distribution concepts and metering principles. Student must earn a "C" or better to advance to Overhead Techniques and Projects II. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 1 time.** 

Prerequisite(s): Grade of C or better in Mathematics 107, English 197, Technology 448-1 and 449.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.



#### **TECHNOLOGY 458**

#### **Overhead Techniques and Projects II**

In this second semester class, students learn about and use advanced levels of topics such as aerial climbing, rope knots and splices, electrical connectors, electrical test equipment, as well as hand and power tools. Students also learn basic hydraulic principles. Application and installation of various electrical apparatus in a lab environment is completed by students. Overhead distribution structures are constructed, protective grounding is introduced and live line work such as rubber gloving and hot stick use (deenergized lines). Underground distribution (UD) equipment is introduced including cable terminating tools and cable locating equipment. Students will install and terminate UD cable. Three-phase concepts such as metering and UD are covered. The class covers varies component pieces of electrical distribution equipment. The class is introduced to current prospective devices including automatic throw overs, high voltage fuses, sectionalizers and oil current reclosers. Students learn to identify various type switches and are introduced to step-type voltage regulators. Students practice safety concepts common to line workers. Students also identify and read distribution maps. A trencher/cable plow, trucks and other mobile equipment are used by students. The student must earn a C or better in this course. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Technology 452, 453, and 462.



#### **TECHNOLOGY 459**

#### **Construction Safety and Rescue**

This course is intended to provide students with a basic understanding of safety practices found in the construction industry. The student will be provided specific instruction in Flagging and Cardiopulmonary Resuscitation (CPR). Emphasis will be placed upon those areas in construction that are the most hazardous, using OSHA standards as a guide. Upon completion, students will be issued the OSHA construction safety and health 10-hour course completion card. The student will be placed upon those areas in the electrical line worker profession. Student must earn a "C" or better in course to advance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Technology 452, 453, and 462.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### TECHNOLOGY 462

#### **Vocational Physical Training II**

Vocational Physical Training focuses on preparing students for the physical challenges that line worker careers require. Students will build upon the skills developed in Vocational Physical Training I. Students will learn how to select foods to provide optimum health and the best sources of energy. Students will learn how to read labels and how to use food to cleanse and maintain overall health. Students will build upon techniques for stretching, warming up and physical training. Student must earn a grade of C or better in course to advance to Vocational Physical Training III. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Technology 448.

2 LAB HOURS. 1 CREDIT HOUR.

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#### TECHNOLOGY 463

#### **Vocational Physical Training III**

Vocational Physical Training focuses on preparing students for the physical challenges that line worker careers require. Students will build upon the skills developed in Vocational Physical Training II. Students will learn how to produce ideal body composition through food intake and how to balance other physical dimensions of self through physical activities. Students will learn advanced techniques to stretch, warm up and physically train. Student must earn a C or better to satisfy course and certificate completion. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Technology 462.

2 LAB HOURS. 1 CREDIT HOUR.



#### **TECHNOLOGY 464**

#### **Power Equipment Operation I**

This course provides instruction in preparation for obtaining a commercial driver's license. In addition, the class covers the operation and use of a variety of power equipment commonly used in the electric power industry including the use of bucket trucks, power take-off equipment, trailers, cable pullers and tensioners. Student must earn a grade of C or better in the course to advance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 107, English 197, Technology 448-1 and 449.

2 LECTURE HOURS AND 1 LAB HOUR. 2.5 CREDIT HOURS.



#### **TECHNOLOGY 465**

Painting and Decorating

1 LECTURE HOUR AND 6 LAB HOURS. 2-3 CREDIT HOURS.

#### **TECHNOLOGY 466** Introduction to Painting

The course is designed to provide an overview of the painting and decorating trade, which includes the history of the industry, job ethics, and terminology utilized within the industry. Critical thinking employability skills will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.

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#### TECHNOLOGY 467

#### Introduction to Painting Tools

The course is designed to provide students with an overview of the proper use and care of painting tools, equipment, selection, mixing, and application of materials used in painting. Emphasis will also be on safety practices and the storage and disposal of materials. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.

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#### **TECHNOLOGY 468**

#### **Basic Taping**

The course is designed to provide students with instruction in the preparation of surfaces of taping. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.

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#### TECHNOLOGY 469

#### **Advance Plumbing/Pipefitting**

This course offers students the opportunity to increase their skills and knowledge in the plumbing industry. Course material covered will include art of pipe sizing, print reading, fitting allowance, code review, thermodynamics/pipe connection above and below grade. A review of the proper procedure for solving offset problems will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Technology 434-1, or one year experience in the plumbing industry.

#### 1 LECTURE HOUR AND 6 LAB HOURS. 3 CREDIT HOURS.



#### TECHNOLOGY 470

#### **Power Equipment Operations II**

This course is a continuation of 330TECH 464 to provide instruction in preparation for obtaining a commercial driver's license. In addition, the class covers the operation and use of a variety of power equipment commonly used in the electric power industry including the use of bucket trucks. Power take-off equipment, trailers, cable pullers and tensioners. Students must earn a grade of C or better in the course to advance. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 107, and English 197, and Technology 448, 449, and 464.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### **TECHNOLOGY 471**

#### **Exterior Repair and Remodeling**

This course will instruct students to remove and replace doors and windows; install exterior hardware; install weatherization, insulation and roofing materials. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.

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#### **TECHNOLOGY 481**

#### **Interior Repair and Remodeling**

This course will instruct students to make minor plaster repairs; install interior hardware; replace/repair damaged wood flooring, tile and other floor coverings; apply wallpaper, paints, and other coatings. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 491

#### **Residential Electrical Wiring**

This course will instruct students in writing of various electrical configurations commonly found in residential systems. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 9 LAB HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 509 Introduction to Basic Arc Welding

1-2 LECTURE HOURS AND 3-12 LAB HOURS. 2-6 CREDIT HOURS.



#### **TECHNOLOGY 510** Blueprint, Layout and Fabrication 2 LECTURE HOURS, 2 CREDIT HOURS.



#### TECHNOLOGY 515 Related Mathematics I 4 LECTURE HOURS. 4 CREDIT HOURS.



**TECHNOLOGY 516 Related Mathematics II** 4 LECTURE HOURS. 4 CREDIT HOURS.



#### **TECHNOLOGY 520**

Arc Welding

This course provides continued development of the basic skills for performing operations with mild steel plates. Student progress in welding from flat to vertical, down to horizontal, and to vertical up positions. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 332ENGR 509.

2 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.



#### TECHNOLOGY 526 Welding Mathematics I

1-2 LECTURE HOURS. 1-2 CREDIT HOURS.



#### **TECHNOLOGY 530**

Advanced Welding 4 LECTURE HOURS AND 6 LAB HOURS. 4 CREDIT HOURS.

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#### **TECHNOLOGY 581**

#### **Concrete Framing**

This course will acquaint students with industry terminology, the tools used in the trade, and safety procedures. Instruction and demonstration will introduce students to the application of footings, foundation walls, and slab, and stair construction. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.

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#### **TECHNOLOGY 582** Residential Carpentry

Training consists of an orientation into the field of carpentry, industry terminology, and the discipline and the uses of tools of the trade. Students will receive handson training in the recognition and application of the materials used in residential structures. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 3 LAB HOURS. 2 CREDIT HOURS.



#### **TECHNOLOGY 583**

#### Basic Hand Tools

This course is designed to introduce students to the operation and safe use of various types of hand tools. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **TECHNOLOGY 715**

#### Introduction to Hand and Power Tools

This course will enable students to identify, maintain, and illustrate proper handling and care of the various hand and power tools. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 6 LAB HOURS. 1-3 CREDIT HOURS.



#### TECHNOLOGY 767

#### **Blueprint Reading I**

Principles and practices involved in the interpretation of blueprints of varied complexity related to actual trade projects. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **TECHNOLOGY 768**



Continuation of Blueprint Reading I. This course will further develop students' ability to interpret drawings of intermediate and advanced complexity related to actual trade projects. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### TECHNOLOGY 769 Blueprint Reading III

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### THEATER ART

#### **THEATER ART 129**

#### **Introduction to Theater History**

Introduction to theater history from its origins to the present including theatrical styles and literature. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **THEATER ART 130**

#### Stagecraft

Introduces safety procedures and basic techniques of scenery and property construction, tool use, scene painting, and backstage organization. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



IAI/MAJOR: KK WR

#### **THEATER ART 132**

#### **Theater Production, Direction and Management**

Production and direction of plays; experience in play selection, theater organization, scheduling, audience analysis, box office and record keeping, and publicity. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **THEATER ART 133**

#### Acting I

Acting techniques, stressing exercises, improvisations, prepared and general acting situations; theories of method and technical methods explained and presented; survey of acting styles. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



IAI/MAJOR: MX OH TR HW WR

#### **THEATER ART 135**

#### **Theater and Special Projects**

Special project permitting independent research and/or study, includes writing of a play or design and execution of a costume or a special and unusual unit of scenery. Not more than three hours of credit counted toward graduation. Writing assignments, as appropriate to the discipline, are part of the course.

**1 LECTURE HOUR. 1 CREDIT HOUR.** 



#### **THEATER ART 136**

#### Makeup for Stage Screen and TV

Practical class in makeup and related arts, showing technique for using false hair, wigs, beards and other makeup specialties as well as general makeup of all kinds for stage, screen and television. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS. 2 CREDIT HOURS.



#### **THEATER ART 137**

#### Stage Lighting

Comprehensive study of theory and technique of lighting for the theater; use of all instruments and dimming controls, work on sound in theater. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### THEATER ART 138

#### Topics in Theater

Special survey courses introducing employment opportunities and procedures in theater. Writing assignments, as appropriate to the discipline, are part of the course. Course runs in a rotation of 3 topics. Courses may be repeated for a total of 3 credit hours. **ARC: 3 times.** 

1-3 LECTURE HOURS. 1-3 CREDIT HOURS.



#### THEATER ART 140 Sound for Theater

Comprehensive Study of theory and technique of sound and sound engineering; use of all instruments amplification and recording equipment. Writing assignments

as appropriate to discipline are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 118.

3 LECTURE HOURS. 3 CREDIT HOURS.

## THEATER ART 141

#### **Costumes and Wardrobe**

Introduces theory of costume design, focusing on safety procedures and basic techniques of costume and accessory construction, tool use, fitting and draping, and costume shop organization through projects in cutting, stitching, and finishing costumes for production. Writing assignments as appropriate to discipline are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### THEATER ART 143

Acting Workshop

Practical workshop in performance styles, stage techniques, timing, scene study and improvisations; students will cooperate in class-produced one-act plays. Writing assignments, as appropriate to the discipline, are part of the course.



# COURSE DESCRIPTIONS

Credit Courses (A-Z)

#### **THEATER ART 144**

#### **Practice in Modern Theater**

Workshop in production of modern plays; readers theater methods will be used in total concept of modern theater production; less emphasis on detail than in Theater Art 143. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 2 LAB HOURS. 2 CREDIT HOURS.



#### **THEATER ART 225**

#### **Independent Internship Assignment**

A course of planned and supervised training that allows the application of theory to actual practice, preparing a student for working independently toward specific career objectives. It takes place at a regular theater related worksite and instructions/supervision is provided by an employee at the worksite. Students may receive regular pay scale if allowed and if available. Course includes on-campus one-hour weekly seminar. Writing assignments as appropriate to discipline are part of the course. **Allowed Repeatable Course:** Not more than an accumulated 12 credit hours will be counted toward graduation. **ARC: 3 times.** 

Prerequisite(s): Consent of Department Chairperson/Coordinator.

1-2 LECTURE HOURS AND 20 LAB HOURS. 3-6 CREDIT HOURS.



#### THEATER ART 230 Stage Management

Practice in stage management. Students will work with scenes and plays as a stage manager, will operate special sound effects and recording equipment, and will make a complete sound track for a play. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Theater Art 131, or consent of Department Chairperson.

2 LECTURE HOURS AND 4 LAB HOURS. 4 CREDIT HOURS.



#### **THEATER ART 232**

#### **Theater Workshop**

Participation in production of one-act and full length plays with class, operated as a theater company; students will work in all phases of theater including touring theater, acting, directing, and other areas of theater as a full company experience. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **THEATER ART 233**

#### Theater Design

Scene design including preparation of plans, scale models and ground plans; history of design; project: full design for play currently produced in the theater. Writing assignments, as appropriate to the discipline, are part of the course. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **THEATER ART 235**

#### Acting II

A continuation of Acting I with an emphasis on an intensive approach to acting exercises, improvisation and scene study. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Theater Art 133 or consent of Department Chair.



#### **THEATER ART 236** Voice and Movement

The study of using voice and movement to interpret and perform works of literature, such as essays, letters, novels, poetry, and short stories, with an emphasis on communicating that interpretation to an audience. Writing assignments as appropriate to discipline are part of the course.

Prerequisite(s): Grade of C or better in Theater Art 133 or Theater Art 134.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### **THEATER ART 237**

#### **Theater Production and Management**

Production and management of plays and theaters; survey of theater and production organization, scheduling audience analysis, box office operation, record keeping and publicity. Writing assignments as appropriate to discipline are part of the course.

Prerequisite(s): Grade of C or better in Mathematics 118 and Theater Art 230, or consent of Department Chairperson.

3 LECTURE HOURS AND 2 LAB HOURS. 4 CREDIT HOURS.

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#### THEATER ART 240

#### **Play Production**

A literary exploration of the relationships between dramatic text and the play in performance, with special emphasis on basic terminology and methodology. Representative plays are studied in their genre, historical, and social contexts. Writing assignments as appropriate to discipline are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### THEATER ART 242

#### Improvisational Theater Workshop

Theory and practice of improvisational acting techniques; development of scripting in the moment, development of character and styles; designing and performing an improvisational show. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### THEATER ART 252

#### **Children's Theater Workshop**

The students will participate in a production of a play for children. The class will operate as a theater company and students will work in all phases of theater including acting, directing, stage managing and producing as a full company experience. Writing assignments, as appropriate to the discipline, are part of the course.



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS

#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 150 Introduction to Transportation Administration

This course provides an overview of basic principles in both the public and private sectors; covers state and federal regulations; provides a historical look at transportation in the U.S. and the impact it has on the economy; characteristics of different models of transportation will be discussed. Review support functions for transportation management. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 151 Central Store: Applied Logistics

This course allows students to perform entry-level job functions in "The Central Store," which is a live logistics operation. In this course, students work in the Central Store under supervision, allowing them an opportunity to gain the skills needed to demonstrate preparedness for full time employment in a logistics environment. Additionally, students will apply critical thinking and business communications skills. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 3 times.** 

Prerequisite(s): Grade of C or better in BUSINES 155.

4 LECTURE HOURS AND 2 LAB HOURS. 6 CREDIT HOURS.



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 152

#### **Introduction to Business Logistics**

An introduction to the interrelated activities involved with the inbound, in process and outbound movement and storage of goods as well as the related information from the emphasis placed on how the functional areas of logistics warehousing and packing impact supply channel decision-making. Introduction and analysis of the logistics concepts to include a brief history of logistics, the management of transportation, inventory, packaging, warehousing, materials handling, order processing, facility location, and customer service. Writing assignments, as appropriate to the discipline, are part of the course.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 154

#### Traffic Management/Customer Service

An introduction of general customer service roles and functions. Functions include: import/export, vendor management inventory, order management deduction management, credit, pricing and promotions, and delivery tracking. Covers the fundamentals of finished goods movement from the point of production to the receipt by the customer; includes transportation, warehousing, inventory deployment and physical distribution. Writing assignments, as appropriate to the discipline, are part of the course.

#### **3 LECTURE HOURS. 3 CREDIT HOURS.**



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 156 Warehousing and Distribution

This course covers warehouse layout and usage based on product requirements such as refrigeration, storage requirements, hazardous materials; staging areas for multiple trailer/railcar loading or unloading; timely locator system including computer controlled systems; material handling and equipment; racking; packaging and just in time/cross docking. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 330Transportation 150.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 158 Purchasing

Overview of purchasing responsibilities, process and procedures. Understanding supplier selection and administration. Sourcing strategies and identifying new suppliers. Negotiation strategies and techniques. The influence of purchasing on profitability and cost reduction techniques. How to write purchase orders, blanket orders, and contracts. Supplier quality assurance. Role of purchasing in the logistics process and organization. Developing understanding of a commodity. Understanding total cost in evaluating suppliers, supplier stocking programs, consignment. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 200 Export/Import Management

A study of import/export shipping procedures including customs clearance, bonded shipping, import financing and letters of credit, diversion, customer regulations, insurance, import duties and trade restrictions; will discuss selection of transportation mode; covers raw materials, components and finished goods. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 330Transportation 150.

3 LECTURE HOURS. 3 CREDIT HOURS.



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 202 Labor and Business Law/Legal Compliance

This course provides and overview of the National Labor Relations Act and various governmental agencies that oversee the operations of business in America. Covers the fundamentals responsibilities of the employer in the workplace, as it relates to rules and regulations set by OSHA, the DOT, and the FAA, as well as other agencies that govern business in one way or another. Covers state and federal regulations governing employee rights, collective bargaining units, and labor practices. Writing assignments, as appropriate to the discipline, are part of the course.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 204

#### **Global Logistics Management**

The course is designed to survey the impact of the emerging global marketplace on today's business environment. In particular, this case study course will integrate the concepts, theories, and evolving practices of global supply chains with today's marketplace. Topics include international terms of sale, impact of e-commerce on global strategies, international transportation carriers, documentation issues, global third-party providers, global sourcing and ethical considerations. Emphasis will be on how logistics functions as a tool for the integration of international operations. Case studies of companies involved in global logistics practices will be utilized in conjunction with other source materials. Special emphasis will be placed in identifying, analyzing, and solving complex business problem situations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 330Transportation 152.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 

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#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 206

#### **E-Commerce Technology**

The purpose of this course is to provide students with an understanding of the role of electronic commerce (e-commerce) and its impact on supply chain management decision-making. This course is designed to provide students with a historical perspective of the evolution of e-commerce and how that has affected the supply chain in different organizations. The course will also provide students with an understanding of some of the latest techniques utilized by leading companies in synchronizing and managing their extended supply chains. The course will examine the emerging role of electronic commerce (e-Commerce) and its impact on logistics and supply chain organizations. Topics include a history of e-commerce, business to business (B2B) models, business to consumer (B2C) models, as well as the evolving paradigm shift e-Commerce is creating for warehousing and transportation strategies and the way we conduct business. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 123 and Mathematics 118 and 330Transportation 158.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 208 Supply Chain Optimization/Information System

Understand tool supply chain cost. Material flow from suppliers. Warehousing and distribution costs and optimization. Performance measurements for the supply chain. Customer relationship management. Strategic alliances in the supply chain. Relationships with other parts of the organization. Sales and operations planning. An overview and analysis of the various information management technology tools used across the supply chain. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in 330Transportation 150, 156, 158 and 200. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 210 Inventory Control

Fundamental principles of inventory control. Inventory classification-raw materials, work-in-process, and finished goods. Using the 80/20 rule and ABC classifications. Importance of inventory record accuracy. Inventory turnover and other inventory measurements. Principles of Material Requirements Planning and MRP II. Inventory control systems. Internal and external lead time and cumulative lead time. Excess and obsolete inventory. Role of inventory control in the logistics process and organization. Physical inventories and cycle counting. Scheduling techniques. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Computer Information Systems 123.

**3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### TRANSPORTATION/DISTRIBUTION/LOGISTICS 212 Supervised Work-Based Learning

Learning is designed to provide an opportunity to perform in a supply-chain/ warehousing setting. Students are placed in a college-approved employment situation for 200 hours during a semester. The students may work full or part-time to complete this requirement. Writing assignments, as appropriate to the discipline, are part of the course.

25 LAB HOURS. 5 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS**

#### **VISUAL COMMUNICATIONS 101**

#### Introduction to Visual Communication

Introduction to the history and industry of visual communication. Basic design principles and practical application of visual communication design in illustration, typography, photography and publication, website production and motion graphics. Writing assignments, as appropriate to the discipline, are part of the course.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 102 Website Design I

Basic procedures in preparing website design and production; includes web code techniques, color theory, typography and composing style sheets and photo layout. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100, and Grade of C or better in Visual Communications 101, 122 and 224, or consent of Department Chairperson.

1 LECTURE HOUR AND 4 LAB HOURS. 3 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS 103**

#### **Commercial Photography**

Basic procedures of digital image capture of products and people. Explores the use of digital cameras as related to visual communication. Covers the basic commercial photography techniques in lighting, editing and effects. Writing assignments, as appropriate to the discipline, are part of the course.



#### VISUAL COMMUNICATIONS 104



Basic study of the industry and practice of photography using the digital camera. Topics include basic camera operations and techniques, portraits, lighting, and post-production techniques such as editing and retouching. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS 110**

#### **Digital Production**

A study of the digital prepress and print production procedures for commercial printing; includes planning and problem-solving in layout and design, desktop publishing, digital imaging, proofing and digital print work. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Visual Communications 101, 104, 122, and 224.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 114

#### **Electronic Stripping and Platemaking I**

Basic instruction and practice in stripping of line film, halftone film, and platemaking. Screen tints, color blocking, butting and overlapping; contacting, step and repeat procedures, proofing, preparation and folding dummies, outlining, and master marks; handling and use of paper, plastic, photo-direct, direct image, and presensitized plates; masking, ruling, screen work, and image construction. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS 122**

#### **Graphic Software**

This course is designed to familiarize students with hardware and software used in the visual communication industry. Software includes Adobe Illustrator, Photoshop, InDesign and other computer graphic software used for page layout design. Emphasis on the study and use of computer hardware equipment as: Monitors, keyboards, scanners, printers and digital cameras, etc. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated six credit hours will be counted towards graduation. **3 LECTURE HOURS. 3 CREDIT HOURS.** 



#### **VISUAL COMMUNICATIONS 132**

#### **Publication Design**

Basic study of the design of publications using current industry-standard software. Page design and techniques, pagination, pacing, photo usage, and production. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

Prerequisite(s): Grade of C or better in Visual Communications 101, 122, and 224, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

#### VISUAL COMMUNICATIONS 134 Logo Identity Design

Basic study of logo design, branding, and corporate identity. Emphasis is placed on actual creation, design briefs, the research of companies, concepts, the use of symbols, typography, wordmarks, and imagery, and how each culminate into a unique identity for a business or institution. Writing assignments, as appropriate to the discipline, are part of the course. **ARC: 2 times.** 

Prerequisite(s): Grade of C or better in Visual Communications 101, 122, and 224. 2 LECTURE HOURS AND 2 LAB HOURS, 3 CREDIT HOURS.

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#### VISUAL COMMUNICATIONS 201 Design Management

The study of design management practices in the visual communication industry: sales, marketing, strategic planning, graphic production, job cost, services, studio layouts, purchasing, inventory control, staff positions/management and proposal writing. Writing assignments, as appropriate to the discipline, are part of the course.

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#### VISUAL COMMUNICATIONS 202 Web Design II

Focus on website design and production; Includes web code techniques, color theory, typography and composing style sheets and photo layout. Explores animation on the web using current web publishing software applications. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Visual Communications 102, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 203 Offset Presswork II

Advanced study in principles and practices of digital and offset presswork, including operation and maintenance of medium size offset press. Includes the study of feed, register, delivery, dampening and inking systems, selection of stock, basic press operations including make-ready selection of inks, safety, quality control, and preventive maintenance. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 206 Digital Image Capture II

Use of digital photography as related to graphic communications processes. Emphasis on advanced operation and setup of digital camera equipment and utilization of a digital studio for completion of projects. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Grade of C or better in Visual Communications 224, or consent of Department Chairperson.



#### **VISUAL COMMUNICATIONS 210**

#### **Newspaper Production**

Theory and practice of mechanical procedures involved in production of a small newspaper by digital and offset lithographic process, includes desktop publishing, graphic design, page layout, scanning, proofing and presswork. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS 212**

#### **Motion Graphics I**

Basic study of animation using industry-standard vector software to create motion, including animated shorts, information graphics, and multimedia presentations. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Eligibility for English 100 and Grade of C or better in Visual Communications 101, 122, 224, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 214

#### **Electronic Stripping and Platemaking II**

Advanced instruction and practice in image assembly utilizing electronic stripping software, including the creation of electronic stripping software, electronic impositions, templates, and platemaking, and master marks; handling and use of dummies, color proofing, platemaking, and master marks, and the handling of RIP and CTP systems. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS 224**

#### **Digital Typography**

This course is designed to familiarize students with the computer hardware and software application used in the visual communication industry. Emphasis on the study of typography font design, specification, effects and copy fitting. Also, a study of the historical developments of typography from ancient to modern times will be studied. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### **VISUAL COMMUNICATIONS 228**

#### **Digital Image Creation/Manipulation II**

An advanced level course used to further explore image editing and retouching applications as related to graphic communications and the printing industry. Emphasis on creating projects for output to print and the web. Use of tools for advanced electronic image creation and manipulation. Writing assignments, as appropriate to the discipline, are part of the course. **Allowed Repeatable Course:** Not more than an accumulated six credit hours will be counted towards graduation. **ARC: 2 times.** 

Prerequisite(s): Grade of C or better in Visual Communications 224, or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 232 Advanced Electronic Publishing

Page layout software application used in the graphics industry for desktop and electronic publishing, pre-press, and image setting. Emphasis on creating projects for output to print and the web, including the handling of RIP ad CTP systems. Writing assignments, as appropriate to the discipline, are part of the course.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.

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#### VISUAL COMMUNICATIONS 290 Practicum Internship

This course is designed to provide students with further academic support while completing the Visual Communications practicum internship to gain experience in the field. On-the-job strategies, furthering student's design education and training, seminars for career development as well as other topics that are career-related will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Completion of the Visual Communications curriculum or consent of Department Chairperson.

2 LECTURE HOURS AND 2 LAB HOURS. 3 CREDIT HOURS.



#### VISUAL COMMUNICATIONS 298 Design Studio

This capstone class prepares students for the visual communications industry, including the study of design and the design business: sales, marketing, strategic planning, production, estimating, services, studio layouts, staff positions, management and proposal writing. Writing assignments, as appropriate to the discipline, are part of the course.

Prerequisite(s): Completion of the Visual Communications curriculum or consent of Department Chairperson.



# $\begin{array}{c} \textbf{COMPLIANCE}\\ \textbf{STATEMENT}\\ \hline \textbf{O} \quad$

#### **Non-discrimination Policies and Procedures**

Equal Opportunity in Programs, Services and Activities

The City Colleges of Chicago does not discriminate on the basis of race, national origin, ethnicity, gender, age, religion, citizenship, sexual orientation, marital status, disability or handicap, veteran status, membership or lawful participation in the activities of any organization, or the exercise of rights guaranteed by local, state, or federal law with respect to hire, terms and conditions of employment, continued employment, admissions, or participation in Board programs, services, or activities as required by Title IX of the Educational Amendments of 1972, the Americans with Disabilities Act of 1990 and the Amendments Act, Section 504 of the Rehabilitation Act of 1973, Title VI or Title VII of the Civil Rights Act of 1964, and other applicable statutes and City Colleges of Chicago policies. The EEO Office is responsible for investigating and responding to equal opportunity concerns, including sexual harassment, of CCC employees, applicants for employment, students or applicants for admission or any other person.

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Complaints must be in writing and filed within 180 days of the discriminatory or harassing act. All complaints must be directed to the EEO Office in the Office of Human Resources and Staff Development at 226 W. Jackson, Blvd., 12th Floor, Chicago, Illinois 60606, or at <u>eeofficer@ccc.edu</u>.

For information regarding the EEO Policy and procedures, please contact the EEO Office at (312) 553-2865.

The complete text of the District's non-discrimination policy is contained in the Student Policy Manual. Copies of the City Colleges of Chicago Equal Opportunity Complaint Procedures and the Discrimination Complaint Form are available in the District Office, Office of Human Resources at the above address, and in the Personnel Office at each of the seven City Colleges of Chicago locations. CCC's non-discrimination policies, and complaint procedures and form are also available on the CCC website at <u>ccc.edu/departments/Pages/Equal-Opportunity-Office-(EEO).aspx</u>.

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