## Discipline-Specific Learning Outcomes

<table>
<thead>
<tr>
<th>Discipline and Discipline Description</th>
<th>Discipline-Specific Learning Outcomes</th>
<th>Discipline-Specific Human Diversity Learning Outcomes</th>
</tr>
</thead>
</table>
| **Mathematics:** Mathematics encompasses the subjects of algebra, geometry, trigonometry, statistics and calculus. Mathematics is the study of numerical, graphical and logical concepts in both abstract and applied settings. | • Apply mathematical rules and principles to perform numeric and symbolic computations with accuracy  
• Think logically and critically to solve problems; explain conclusions; and evaluate evidence or critique the thinking of self and others. Analyze critically and evaluate data that inform one’s perception of the world and place in it.  
• Solve contextual problems and articulate solutions clearly  
• Utilize current technology as a tool to synthesize algebraic and graphic perspectives | Use and synthesize computational, graphical, and logical skills in order to develop solutions about local and global challenges |
| **Physical Sciences:** The Physical Sciences encompass the disciplines of Physics, Geology, Environmental Science, Engineering, Astronomy and Chemistry. These disciplines pertain to natural and physical laws governing natural phenomena, and the study of matter and the changes that it undergoes. This curricular area investigates the underlying principles behind physical and chemical changes. | • Interpret scientific data and research  
• Examine physical scientific problems critically and systematically. Propose hypotheses based on observations  
• Apply scientific principles and concepts to the solving of contextual problems | Apply scientific knowledge to everyday life and articulate how it affects public policy |
| **Natural Sciences:** The Natural Sciences encompass the disciplines of Biology and Microbiology, as well as related sub-disciplines, e.g., ecology and evolution, molecular and cellular biology, anatomy and physiology, and genetics. These areas of study concern the empirical study of natural phenomena occurring within the universe with the specific exclusion of non-natural phenomena. | • Articulate the nature of science and the process of scientific inquiry  
• Create, analyze, evaluate, and test scientific hypotheses using appropriate scientific procedures and instrumentation  
• Identify unifying themes, principles, and repeatable patterns in the natural world  
• Analyze, evaluate, and discuss the impact of scientific discovery on human behavior and thought  
• Articulate the relationship between science, society, and culture  
• Evaluate the impact of scientific knowledge on | Articulate and apply values that illustrate the recognition of the benefits of natural diversity to problems or issues of a scientific nature that arise within society. |
<table>
<thead>
<tr>
<th>Discipline and Discipline Description</th>
<th>Discipline-Specific Learning Outcomes</th>
<th>Discipline-Specific Human Diversity Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fine Arts and Humanities:</strong> The Fine Arts and Humanities encompass the disciplines of Art, Fine Arts, Humanities, Philosophy, Theatre Arts, and Music. These disciplines explore, analyze, and speculate about the complexity of the “human condition” as revealed through various media, including, but not limited to: fictional works, philosophical and historical texts, films, multimedia, studio art, cultural critique, theatrical productions, and musical performances.</td>
<td>• Analyze and interpret various artistic and humanistic “texts,” such as works of literature, art, music, theater, film, philosophy from different ages and cultures</td>
<td>Articulate and apply the principles of humanistic and cultural criticism in ways that demonstrate recognition of the impact of diversity of human existence on creative expression.</td>
</tr>
<tr>
<td><strong>Written and Oral Communication:</strong> Written and Oral Communication encompasses the disciplines of English, Reading, Literature, and Speech. They promote increased literacy and fluency in the various forms of English language communication. They advance the development and expression of critical, rational thought by the analysis of texts derived from diverse origins; by the creation of original compositions; and, by examining language’s manifold styles, structures, and conventions.</td>
<td>• Read, evaluate, and select source materials for the creation of well-developed, coherent written and oral presentations that employ sophisticated logic and reasoning; • Utilize college-level Standard American English grammar, vocabulary, and conventions • Identify main points, supporting evidence, and organizational patterns while engaging critically with written texts and/or oral presentations • Construct well-organized written and oral presentations that employ standard grammar and punctuation, as well as appropriate college-level language.</td>
<td>Articulate in written and oral discourses the complexity of human lives lived locally and globally.</td>
</tr>
<tr>
<td><strong>Social Sciences:</strong> The Social and Behavioral Sciences encompass the disciplines of African American Studies, Anthropology, Economics, Sociology, Political Science, Psychology, and many others. The Social/Behavioral Sciences are the systematic study and critique of human behavior and interaction. They analyze the continuous evolution of society and human progress by exploring social, political, economic and cultural institutions and organizations.</td>
<td>Differentiate, utilize and evaluate theories within the various disciplines that comprise the social sciences Employ social/behavioral science concepts and theories in the analysis and articulation of complex sociopolitical problems Apply the scientific method to the analysis of social issues of global significance.</td>
<td>Express respect for human diversity in its many varied forms, i.e., gender, race, national origin, ethnicity, age, sexual orientation, religious practice and social class.</td>
</tr>
<tr>
<td><strong>Information Literacy:</strong> Information literacy is a skill that is necessary for the development of</td>
<td>• Evaluate resources more critically</td>
<td>Seek, analyze and deploy information resources in ways that encourage a respect for the diversity of</td>
</tr>
</tbody>
</table>
sophisticated knowledge and fluency in all fields of study. Thus, as a consequence of completing multiple library instruction sessions successfully, students will be able to access and evaluate information efficiently; use and manage information to fulfill course objectives and/or assignments; and, interpret and synthesize the information found.

**World Languages** World Languages encompasses all non-English languages in the General Education curriculum, i.e., Chinese, French, and Spanish. The study of these languages strives to develop communication skills, propagate knowledge and widen perspectives on the global community.

| Human expression | Access resources using online catalogs and electronic databases Illustrate effective searching strategies when searching the Internet | World Languages | Demonstrate the effective, level-appropriate written and oral target-language communication skills | Demonstrate precise, accurate, and effective level-appropriate oral and written target-language communication skills | Summarize and respond to texts and messages that are written and spoken in the target-language Utilize the target-language in everyday settings and circumstances | Articulate, acknowledge and appreciate cross-cultural similarities and differences in order to find common ground and enhance global citizenship |