

## Alignment Between the University General Education Policy and Student Learning Outcomes Assessment Goals and Objectives

<p>B.5. Integrated Capstone in the Natural Sciences</p> <p>Courses: Natural Science 300 (4 units)      Natural Science 310 (4 units)  Natural Science 314 (4 units)      Natural Science 320 (4 units)  Natural Science 325 (4 units)      Natural Science 351 (4 units)  Natural Science 360 (4 units)</p>	
GE Policy	Outcomes Assessment Learning Goals
<p>The integrated learning intended with these courses is to provide students with an understanding of the interrelationships among disciplines and their applications to contemporary complex environments. Such courses will integrate, develop, and explore the implications of the skills and knowledge acquired in the lower division courses, in effect providing a culminating experience in each school by building upon that knowledge and those skills taught in the lower division General Education courses. In so doing, as with the upper division electives, the Integrative Capstone courses are expected to provide a higher level of analysis than lower division courses. More specifically, these Integrative Capstone courses should also:</p> <ol style="list-style-type: none"> <li>1. Be at the upper division level and in the large-lecture format, except when small classes are needed for off-campus offerings;</li> <li>2. Extend, apply and integrate skills and knowledge gained in the basic skills and one or more of the lower division breadth areas, with prerequisites limited to the relevant basic skills or breadth courses required within the General Education program;</li> <li>3. Be interdisciplinary, integrating</li> </ol>	<p>Upon Completion of this requirement students will be able to:</p> <p>Goal 5: Upon completion of a course in the B5 (natural sciences capstone) area, students will be able to understand the interrelationships among disciplines (within and across breadth areas) and their applications to contemporary complex environments.</p> <p>Objectives:</p> <ol style="list-style-type: none"> <li>1. Discuss the social and historical context of scientific developments within the physical and life sciences.</li> <li>2. Explain the place of the natural sciences breadth area within the broader context of human thought and social development.</li> <li>3. Integrate, develop and explore the implications of the skills and knowledge acquired in the lower-division general education courses.</li> <li>4. Engage in a higher level of analysis than in lower-division general education courses.</li> <li>5. Where appropriate, understand the impact of human behavior, gender roles, human sexuality, multicultural and/or international issues, and technological and organizational developments on a topic (or vice versa).</li> <li>6. Students will broaden their knowledge of fundamental laws, theories and facts that comprise our understanding of the contemporary physical world, of the origins of scientific discovery, and the social and economic implications of scientific and technological developments</li> </ol>

<p>knowledge across disciplines within and across the breadth areas, and placing each area in the broader context of human thought and social development (The cross-listing of such courses could also be done, but all must be classified within at least one of the three breadth areas.);</p> <ol style="list-style-type: none"><li>4. Consider possible arrangements in clusters for thematic purposes, with the understanding that students must still meet the requirement of completing one such course in each of the three breadth areas. (Capstone courses may also be designated as meeting the Multicultural/Gender requirement.);</li><li>5. Avoid the narrowness and specificity more appropriate to advanced courses in the program of a major, but, on the other hand, consider innovative directions and subject matter not easily included in the lower division courses;</li><li>6. Where appropriate to the specific theme, incorporate multicultural and/or international issues from a comparative perspective that goes beyond a single country, culture or social system;</li><li>7. Where appropriate, also include perspectives on human behavior, gender roles, and human sexuality as they relate to the theme topic, for example, either the impact of these on that topic or vice versa;</li><li>8. Where appropriate, consider technological and organizational developments in relation to the theme topic; and</li><li>9. While breadth, integration of knowledge and skills, and topic areas that go beyond the scope of</li></ol>	<p>developments.</p>
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traditional courses or disciplines are key objectives for these courses, each school may determine that extent to which it wants its integrative Capstone courses to more specifically expand upon what has been taught in its lower division courses. For example, Natural Sciences courses are expected to broaden students' knowledge of fundamental laws, theories, and facts that comprise our understanding of the contemporary physical world, of the origins of scientific discovery, and the implication of scientific and technological developments.