

**Bachelor of Science in Biology AY 2011/12**

<b>Student Learning Outcomes</b>	<b>Assessment Methods &amp; Criteria</b>	<b>Student Learning Evidence</b>	<b>Utilization of Evidence</b>
Graduates will demonstrate understanding of the general principles of life.	Students will complete an assignment in BIOL 1201 in the early part of their program and post it to their Taskstream portfolio. The assignment will be evaluated by the faculty using an associated rubric.		
Graduates will demonstrate understanding of the general principles of life.	Students in BIOL 4110 will complete an assignment designed to assess their understanding of general principles of life toward the completion of their curriculum. The assignment will be posted in the student's Taskstream portfolio. Biology faculty will score the assignment with a rubric developed for this assignment. It is desired that 80% of the graduates will score a 2.5 or above on this rubric.		

<p>Graduates will demonstrate understanding of the chemical properties, structural organization and functional characteristics of living organisms.</p>	<p>Students will be given an assignment related to this outcome in BIOL 1201 and 1202. Each of these assignments will be posted to the student's Taskstream portfolio. Biology faculty will evaluate these assignments using the associated rubrics. It is desired that 80% of the graduates will score an average of 2.5 or better on the BIOL 1201 rubric and that 80% of the graduates will score an average of 2.0 on the BIOL 1202 rubric.</p>		
<p>Graduates will demonstrate understanding of the scientific method and be able to apply it to solve problems.</p>	<p>An entry-level grasp of this outcome will be assessed with an assignment in BIOL 1201 that will be posted to Taskstream; Faculty will evaluate it with an associated rubric. It is desired that 80% of the graduates will score an average of 2.25 or higher on the rubric.</p>		
<p>Graduates will demonstrate understanding of the scientific method and be able to apply it to solve problems.</p>	<p>Mid-level mastery of this outcome will be assessed with an assignment in BIOL 2080. Students will post the assignment to their Taskstream portfolios. Faculty will evaluate the assignment using an associated rubric. It is desired that 80% of the graduates will score an average of 2 or above on the rubric.</p>		

<p>Graduates will demonstrate understanding of the scientific method and be able to apply it to solve problems.</p>	<p>Upper-level mastery of this outcome will be assessed with the student research assignments in BIOL 3990 (elective), BIOL 4253 (required) and BIOL 4011 (elective). Students will post their final papers in these classes to their Taskstream portfolios. Faculty will score the papers with an associated rubric. It is desired that at least 80% of the graduates will score an average of 2.0 or above on this rubric.</p>		
<p>Graduates will demonstrate the ability to differentiate between ethical and unethical behavior with regard to science.</p>	<p>Students in USTY 1001 for biology majors will be given a 10 question quiz in which they are presented with short scenarios which they must rate as ethical or unethical and write a short explanation of their decision. The quiz will be scored by the faculty with a rubric. It is desired that 80% of the graduates will have scored 80% or better on this quiz.</p>		

<p>Graduates will demonstrate the ability to differentiate between ethical and unethical behavior with regard to science.</p>	<p>Students in Senior Seminar (BIOL 4000) will be presented with four complex scenarios. For each they must answer questions on the ethics of the situation and what an ethical response would entail. The students responses will be posted to Taskstream and scored by the faculty using a rubric. It is desired that 80% of the graduates will score an average of 2.0 and above on this rubric.</p>		
<p>Graduates will develop a behavior of questioning and analytical skills that lead to a life-long habit of learning.</p>	<p>Students will complete a "need for cognition" survey in BIOL 1000 (entry level), BIOL 3160 (mid level) and Senior Seminar (upper level). Norms for this survey have been established by the agency that established it. It is desired that the average for LSUA's graduates will equal or exceed the norm by the time they reach Senior Seminar.</p>		
<p>Graduates will develop a behavior of questioning and analytical skills that lead to a life-long habit of learning.</p>	<p>Graduates will be rated by the faculty as to whether each graduate has acquired the behavior of questioning and the skills for life-long learning. It is desired that 80% of the graduates will be rated positively by the faculty.</p>		

<p>Graduates will demonstrate the potential to use their biological education when making decisions about environmental and political issues relating to science.</p>	<p>Graduates will complete a group project and individual paper in BIOL 4000 (Senior Seminar) designed to assess this outcome. The group project will be presented orally to the faculty and the individual paper will be posted to the student's Taskstream portfolio. The paper will be assessed by the faculty using a rubric. It is desired that 80% of the graduates will score an average of 2.0 or higher on this rubric.</p>		
<p>Graduates will demonstrate an understanding of ecological and environmental concepts, including issues that affect Louisiana.</p>	<p>Entry-level assessment of this outcome will be done in BIOL 1202. An assignment will be given which the students must post to their Taskstream portfolios. Faculty will score the assignments with a rubric developed for this outcome. It is desired that 80% of the graduates will score an average of 2.25 or higher on this rubric.</p>		

<p>Graduates will demonstrate an understanding of ecological and environmental concepts, including issues that affect Louisiana.</p>	<p>An advanced-level of assessment of this outcome will take place in BIOL 4253. Students will be given an assignment that must be posted to their Taskstream account. Faculty will score the assignments with a rubric. It is desired that 80% of the graduates will score and average of 2.5 or greater on this rubric.</p>		
<p>Graduates will demonstrate the ability to communicate information verbally and in writing in a professional manner.</p>	<p>Students will choose their best example of a written paper from BIOL 3990, 4253, 4000, 4015, 3150, and 4110. The written paper will be posted to the student's Taskstream portfolio. Faculty will evaluate the written paper with a rubric. BIOL 3990, 4253, and 4000, all require oral presentations. Faculty will score the students' oral presentations with a rubric and save the results. The highest score that a student receives on one of these presentations will be used for this assessment. It is desired that 80% of the graduates will have an average score of 2.25 or higher on the rubric for the written paper. The standard of achievement has not yet been set for the oral presentation.</p>		

<p>Graduates will demonstrate the ability to find and evaluate scientific information.</p>	<p>Students in USTY 1001 sections for biology majors will be given library instruction by a librarian and will be required to take the LILT quizzes. It is desired that 80% of the graduates will have scored 80% or higher on the LILT quizzes.</p>		
<p>Graduates will demonstrate the ability to find and evaluate scientific information.</p>	<p>Students in BIOL 2080, BIOL 2031, 3153, 3160, and 3500 will be given an assignment to interpret a scientific article chosen by the instructor for a mid-level assessment of this outcome. The student will post the best example of their work from these classes. Faculty will score this work with a rubric. It is desired that 80% of the graduates will score an average of 2.25 or above on the rubric.</p>		

<p>Graduates will demonstrate the ability to find and evaluate scientific information.</p>	<p>Students in BIOL 3990, 4253, 4000, 4015, 3150, and 4110 will be assessed based on the bibliography of the best example they post for Outcome 7 written paper. The bibliography will be evaluated by the faculty using a rubric. The rubric for the bibliography was not attached to the assignments and thus unavailable for faculty to use for scoring. No desired level of achievement has been set for that rubric.</p>		
<p>Graduates will have had exposure to field-specific literature.</p>	<p>Biology students will be given a spreadsheet at the end of each biology course on which they will rate the degree of exposure to field-specific literature in the course. It is desired that ....</p>		