

Biological Science, BS Assessment Plan

Biological Science SLOs and POs	Criteria for Success	Current State of Assessment
Explain fundamental biological principles from the major areas of biology (cellular, molecular, physiology, organismal, ecology, and evolution).	<ol style="list-style-type: none"> 1) Significant increase in concept inventory scores from pre- to post-testing within relevant courses. 2) Significant increase in concept inventory scores in upper-division courses than in introductory courses. 	Partially assessed in spring 2015. Results limited. Reassessed 2015-2016
Design a biological research study to answer a testable question, using appropriate and ethical research procedures for data collection and analysis.	<ol style="list-style-type: none"> 1) Significant increase in TOSLS scores from introductory to upper division courses. 2) 70% on Experimental Design Test after instruction in introductory course. 	Assessed in BIOL 151/152 and BIOL 424, 418 in SP 2016.
Communicate ideas related to biological concepts, or the results of biological investigations, using professionally appropriate oral (e.g. poster or oral presentations), visual (e.g. graphs, tables), and written (e.g. research proposal, journal article) formats.	<ol style="list-style-type: none"> 1) Upper-division students average 70% on presentation rubric. 2) Student self-report improvement in writing, oral, and visual presentations. 	Planned: Spring 2017 – Fall 2017
Engage in projects that require contributions of multiple individuals, resulting in a product that reflects the ability to collaborate and communicate.	<ol style="list-style-type: none"> 1) A minimum of 75% of introductory, gateway, and capstone courses include a collaborative assignment that meets Performance Objective. 2) Student self-report improvement in ability to work collaboratively. 	Planned: Spring 2017 – Fall 2017
Demonstrate intellectual independence by distinguishing between reliable and unreliable sources of information while respecting alternative possibilities and explanations.	<ol style="list-style-type: none"> 1) Significant increase in TOSLS scores from introductory biology to capstone course. 	Assessed in BIOL 151/152 and BIOL 424, 418, in SP 2016
Discuss the impact of biological issues on society, the importance of responsible conduct of research, and the role of society in supporting scientific endeavors.	<ol style="list-style-type: none"> 1) Positive evaluation by students of BIOL support for stewardship 2) Evidence of participation in stewardship activities (self-report) 	Planned: Fall 2017