

## Program: Biology

### Academic Program Assessment Plan (2017-2018)

1. Please review last year's assessment results (2016-2017) as well as the Academic Program Assessment Report with the faculty in your program. How does your program plan to take these results into consideration in future programmatic planning?

We will continue to provide opportunities for students to read and interpret scientific results as well as communicate scientific results through discussion and presentation. We feel that our students are meeting this learning objective with the current opportunities in classes and the capstone course.

2. Please review your program's Learning Outcomes. Do any of them need to be updated or clarified?

The Biology Faculty reviewed our learning outcomes on September 14, 2017. We are happy with our current learning outcomes.

- a. Please provide brief indications of the kinds of assessment (e.g. course exams, term papers, course projects, senior seminar, senior interview, etc.) that might be used to assess each outcome. (The purpose here is to see that your program has considered ways it might measure each outcome.)

Learning Outcome	Assessment techniques	Courses	Assessor	Semester
1) describe the organization and diversity of life at levels of complexity from subcellular to ecosystem	Embedded assessment (exam questions, pre and post assessment)	Principles of Biology (201/202)	Pott Mueller	2015-2016
2) demonstrate an understanding of genetic information, hereditary processes, and their relevance to evolutionary change as a product of mutation and natural selection	Embedded assessment (exam questions)	Biology Capstone	Wolf Howe	2014-2015
3) explain the important processes and pathways that sustain living organisms including functional systems for exchange of energy and matter	Embedded assessment (exam questions)  Class projects	Plant Physiology  Comparative Physiology  Biology 201	Stahlheber  ? New faculty member?	2017-2018

4) solve problems by applying a scientific process of inquiry, including the effective use of appropriate techniques, instrumentation, and data analysis	Embedded assessment (exam questions and semester lab projects)	Microbiology Biochemistry	Brian Merkel Warren Johnson	2013-2014
5) identify and interpret findings of scientists and communicate results of scientific work to others in the scientific community and the general public	Oral presentation  Poster presentation  Class projects	Ecology Conservation Biology  Capstone  Mycology or Environmental Micro.	Wolf Wolf  Howe  Grubisha	2016-2017

b. Please compare your Learning Outcomes to the University's main learning objectives: interdisciplinary, problem-focused education; critical thinking; diversity; environmental sustainability; and engaged citizenship. (These objectives were identified in the MLLO Project, which may be found here: <http://www.uwgb.edu/MLLO/>.) Which programmatic outcomes match university mission outcomes?

3. Which outcome will you assess this year (2017-2018)?

3) explain the important processes and pathways that sustain living organisms including functional systems for exchange of energy and matter

4. Which technique will you use to assess this outcome?

Exams, pre/post embedded assessment, papers.

5. Which course or group of students will you assess on the outcome chosen above and when?

Students in upper level courses – Plant Physiology and/or Comparative Physiology. Students in BIO 201.