

Major/Program: Biology

ASSESSMENT SUMMARY

Fall 2017-Spring 2018

What are the student learning outcomes in the <u>major/program</u>?
<ol style="list-style-type: none">1. Students will understand the core and fundamental aspects of living systems.2. Students will be able to conduct scientific research with emphasis on biological research.3. Students will be able to communicate effectively their understanding of life.4. Students will know how to link their training in biology to the common good and the planet.
Which outcome(s) did you assess this academic year?
We examined how well the biology placement test predicted final grade in Intro Bio I (L101).
How did you assess the learning outcomes this academic year?
We worked with Mary Beth Mitchell to help us get a dataset that included biology placement score, final grade in L101 and another 20 factors going back five years. We then conducted a conditional inference tree analysis (a more flexible and easier to understand version of multiple regression).
Please summarize the data you have collected this academic year.
Please see the attached figure. In short, this figure shows that students who come in with a HS GPA above 3.92 do well (As-Bs), but students who have less than a 3.47 HS GPA are especially prone to doing poorly in L101. The score on the biology placement was not significant (hence not appearing in the figure). Factors such as admit type, math placement and SAT math were useful, though.
Please describe any programmatic changes you have made or are planning to make based on the data you have collected (action steps).
We are considering the following two questions: <ol style="list-style-type: none">1) What to do with students who come in with HS GPA less than 3.47 and math SAT less than 560?2) Should we continue using the biology placement exam?

Please report on the progress of your **action steps** reported in 2013-2014. See [Assessment Results](#) for your previous unit reports.

We have conducted a range of actions including retreats, program analyses and an intense self-study and programmatic as well as pedagogical changes to address these steps. Marginal improvements have been observed, additional larger scale changes are being considered and/or implemented.

****Note:** Please use this template to provide the responses to the prompts above.**

