Biomedical Sciences BS

Demonstrate Mastery in Core Concepts in the Fields of Biology and Biomedical Sciences

Goal Description:

Students completing the core courses required for a BS will demonstrate knowledge of core concepts of cell biology, biodiversity, genetics and evolution.

Providing Department: Biomedical Sciences BS

Progress: Ongoing

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Mastery Of Core Curriculum
Learning Objective Description:

Students completing the core courses required for a BS will demonstrate knowledge of core concepts of cell biology, biodiversity, genetics and evolution.

RELATED ITEM LEVEL 2

Mastery of Core Curriculum
Indicator Description:

All students, regardless of concentration area, take the same core courses (BIOL 1406, BIOL 1407, BIOL 3450, and BIOL 4361). Faculty teaching each of these courses will agree on a set of embedded questions to include on the final exam. Students will correctly answer these embedded questions.

Criterion Description:

Students will score 70% on the embedded questions.

Findings Description:

The list of embedded questions is still being formulated for the selected courses. However, the DFQW rate for the upper level courses (where the students should show mastery of core concepts is quite low, especially compared to the lower level courses.

RELATED ITEM LEVEL 3

Mastery of Core Curriculum
Action Description:

Complete the process of embedding standard questions into the listed courses and collect data

G1: Improve Student Scientific Literacy Skills

Goal Description:

Students completing an undergraduate degree in Biomedical Sciences will demonstrate scientific literacy skills.

Providing Department: Biomedical Sciences BS

Progress: Draft

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

G1LO1: Select and Implement an Assessment of Scientific Literacy Skills.
Learning Objective Description:

A committee of stakeholders will evaluate and select a scientific literacy assessment

RELATED ITEM LEVEL 2

G1LO1I1: Select and implement an Assessment of Scientific Literacy Skills

Indicator Description:

List of possible scientific literacy assessments.

Develop analysis plan (stats and criteria for future years)

Criterion Description:

The development of the list of scientific literacy assessments and the analysis plan will be completed by the und of July 2024.

Findings Description:

The committee is currently still evaluating different assessments over the summer and will make a decision by August 1.

RELATED ITEM LEVEL 3

Action - G1LO1I1: Select and implement an Assessment of Scientific Literacy Skills

Action Description:

Select and implement an assessment tool by Aug 2024.

Student Engagement in Undergraduate Research

Goal Description:

Students will engage in the process of scientific discovery by participating in faculty mentored research.

Providing Department: Biomedical Sciences BS

Progress: Ongoing

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Undergraduate Research

Learning Objective Description:

Students will engage in the process of scientific discovery by participating in faculty mentored research.

RELATED ITEM LEVEL 2

Undergraduate Research

Indicator Description:

Students will enroll in BIOL 4095: Undergraduate Research Topics and participate directly in faculty mentored biological research, with the goal of producing publishable research and/or quality research that can be presented at scientific conferences.

Criterion Description:

50% of each graduating class will have enrolled in BIOL 4095 . Using the departmental Faculty Evaluation Instrument, that tracks faculty engagement with undergraduate researchers, the department chair will track the number of peer-reviewed publications and presentations at scientific conference on which our undergraduate students appear on the author line.

Findings Description:

We had 30 students complete the BIOL 4095 course with another 56 students conducting independent research but not for course credit. Between fall and spring semesters, we graduated about 120 undergraduate majors. While we fell short of the 50% of the graduating class enrolling in 4095, a majority of our students did conduct research.

RELATED ITEM LEVEL 3

Undergraduate Research

Action Description:

Work to encourage students to enroll in 4095.

Update to Previous Cycle's Plan for Continuous Improvement Item

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Closing Summary

We did not hit the benchmarks for this degree plan. We will continue to investigate strategies on improving each of the metrics for the degree plan.

Update of Progress to the Previous Cycle's PCI:

We did not meet all benchmarks this past year but did improve over last year.

New Plan for Continuous Improvement Item

Closing Summary:

We did not hit all of our benchmarks this past year but have improved over the previous year. We will continue to work to improve this number.