Gordon State College

Office of

Goals, Outcomes and Evidence of Improvement

2011 - 2015

http://www.gordonstate.edu/art-science/biology

Mission Statement

The mission of the Biology and Physical Sciences is to provide our graduates with the scientific skills and knowledge needed to strive and succeed in a technologically advanced society and pursue graduate and professional education.

Unit Outcomes Assessment Results Report

2014-2015

Goals

1. Development of new concentration(s) to benefit the region and state.
2. Increase number of students graduating with a baccalaureate degree in biology.

Outcomes

1. Develop a wastewater treatment and water management concentration for baccalaureate major in biology.
2. Engage community/business partnerships in wastewater treatment and water management for the establishment of a mutually beneficial internship program.
3. Determine barriers to graduation.
4. Address two barriers to completion.
5. Increase the number of students declaring a major in Biology.
6. Increase number of students progressing from associate to baccalaureate program.

Review of Outcomes

1. Development of wastewater treatment and water management concentration assigned by Dr. Baskin to Dr. Andy Osborne (Math and Physical Science Department).
2. Task force has been formed to identify specific barriers to graduation. A survey has been developed and will be administered to all our students.
3. Barriers to completion:
    a. Lack of financial resources by students
    b. Lack of proper study skills by the students

    c. Poor grades by students in gateway courses - Changed prerequisites for our upper level courses so that students are better prepared to navigate upper level courses and proceed to graduation.
4. In order to increase the number of declared Biology majors:
    a. Group academic advisement for Associate Science candidates were held
    b. Contacted Associate Science students and provided them with information on our Bachelor of Science programs and discussed careers with Biology degrees.
    c. We published a brochure titled “Careers in Biology” and made it available to students on a regular basis.
5. In order to increase the number of students progressing from associate to baccalaureate program:
    a. Group academic advisement for Associate Science candidates were held.
    b. Contacted Associate Science students and provided them with information on our Bachelor of Science programs and discussed careers with Biology degrees.
    c. We published a brochure titled “Careers in Biology” and made it available to students on a regular basis.

Evidence of Improvement

1. Wastewater and water management concentration was not funded.
2. Determined there was not enough student interest in the community for this project.
3. Students were surveyed to determine barriers to graduation.
4. Revise the competency objectives for lower level courses.
5. There was a small increase in students exceeding 2% in the number of students declaring a major in biology.
6. There was a small increase in students exceeding 2% in the number of students progressing from the associate’s to the baccalaureate program.

2013-2014

Goals

1. Assess needs for new full-time faculty in general biology and anatomy and physiology.
2. Evaluate current course descriptions and requirements.
3. Evaluate current assessment practices.

Outcomes

1. More full-time faculty teaching at the introductory level to improve student outcomes.
2. Courses descriptions and prerequisites that promote student success and progression.
3. Align assessment documents with current strategic planning priorities and new assessment strategies.

Evidence of Improvement

1. In response to low MFT scores in the area of botany, we developed new tenure-track position and launched search in botany to provide faculty member to address program weaknesses in this area.
2. In response to our experience in the first iteration of the major, we restructured the Senior Seminar in biology major.
3. Again responding to results on the MFT test, we increased elective options in biology with an emphasis on molecular biology and genetics.
4. In response to comments in the senior student interview, we increased the number of laboratory course offerings (from 6 to 8),
5. In response to comments in the senior student interview, we increased the number of students participating in collaborative research with faculty.
6. We involved six students in Presidential Faculty Summer Research Initiative.
7. We developed broad range of special topics independent research opportunities in biology, chemistry, and physics.
8. We modified a classroom to create a student research laboratory for biology students.
9. In response to poor results on the MFT at the completion of senior seminar, we are altering the prerequisites for the course to ensure that students enrolled have completed, or are concurrently enrolled in the four core courses (BIOL 3200, 3300, 3500, and 4200) so that the course reflects the learning of a senior student and can accurately reflect the effectiveness of our program. This will also allow us to explore using the MFT as a graded portion of the BIOL 4000 course.

Please note: Biology was not a separate department prior to the 2013-2014 school year.