PROGRAM MISSION

The Department of Biological Sciences contributes to the university mission by providing high-quality teaching for both undergraduate and graduate students and a scholarship source for the university and the community. This contribution is strongly enhanced by the ongoing presence of scientific research conducted by our faculty.

PROGRAM GOALS AND OBJECTIVES

GOAL # 1: STUDENTS WILL DEVELOP A BROAD KNOWLEDGE OF THE CONCEPTS OF BIOLOGY.

OBJECTIVE # 1: Students will demonstrate their breadth of knowledge of biological processes at various levels of biological organization.

GOAL # 2: STUDENTS WILL DEVELOP THE INTELLECTUAL AND MECHANICAL SKILLS REQUIRED FOR COMPREHENDING AND CONDUCTING BIOLOGICAL RESEARCH.

OBJECTIVE # 1: Students will demonstrate knowledge of the scientific method and methods of data analysis in the interpretation of scientific observations, and an ability to use scientific communication techniques in three biological sciences sub-disciplines.

GOAL # 3: STUDENTS WILL PARTICIPATE IN RESEARCH AND SCHOLARSHIP ACTIVITY THROUGH INTERACTIONS AMONG STUDENTS, FACULTY AND PROFESSIONAL BIOLOGISTS IN THE COMMUNITY.

OBJECTIVE # 1: During one semester of their senior year, students will attend research seminars given by resident and visiting biologists or participate in a laboratory or field research project under the supervision of resident biologists or professional biologists in the community.

GOAL # 4: STUDENT ASSESSMENT WILL BE INCLUDED AS A PART OF THE

OBJECTIVE # 1: Students will anonymously provide their perceptions of the strengths and weaknesses of the undergraduate major utilizing a written survey instrument.

LEARNER OUTCOMES

Assessment of Program Goals

Assessment of Goal #1: Students will be required to take the ETS Major Field Achievement Test in Biology before they are certified for graduation.

Assessment of Goal #2: If students opt to meet this objective by seminar attendance, the student will submit a written term paper on one of the topics which was presented during the semester. If students opt to meet this objective by participation in a research project, the student will submit a written research report on the project to the supervising faculty member. Copies of the term papers or research reports will be forwarded to the Director of Undergraduate Program Assessment.

Assessment of Goal # 3: During the last semester of their undergraduate program, students will complete a written survey instrument of their perceptions of their undergraduate program. The survey will be administered at the same time as the ETS Major Field Achievement Test in Biology (see Goal # 1). The results will be collected by the Director of Undergraduate Program Assessment.

ASSESSMENT OF LEARNER OUTCOMES

Results

Data will be collected on the assessment instruments each semester.

Feedback Loop

Feedback Loop of assessment of goal #1

The ETS test scores for all majors will be collected by the Director of Undergraduate Program Assessment and evaluated by the Departmental Affairs Committee (DAC). A summary of the evaluation will be presented to the faculty at a special meeting near the end of the semester and discussion will center on the need for corrective action and what, if any, action is needed.

Feedback Loop of assessment of goal #2

The DAC will review all papers. The authors will be identified only by their student numbers. The review will determine whether or not the objectives have been achieved. The results of review will be communicated in writing to faculty.

Feedback Loop of assessment of goal # 3

The Director of Undergraduate Program Assessment will collect completed surveys and summarize the survey data. An overview of the results will be presented to the departmental faculty once per year at a faculty meeting. The faculty will discuss issues arising from that overview and decide if programmatic changes are warranted.