Expected Outcomes: 1. Fundamental Understanding

Auburn graduates with a major in Chemistry will have a basic understanding of the fundamental laws of nature and the ability to apply them to real-world situations.

Related typical general education outcomes:

1  Information Literacy
3  Ability to Critique Arguments

Assessment methods

Method: 1a. Questionnaire

A questionnaire (student/alumni survey) will be sent out after graduation requesting an evaluation of the usefulness of the knowledge acquired after the B.S. Degree program.

Findings:

It was found that most students were satisfied with the B.S. Degree program in Chemistry and Biochemistry.

How did you use findings for improvement?

The information that was gathered could be useful in improving or modifying certain parts of the B.S. Degree program.

Additional comments:

None

Method: 1b. Feedback Interview

Chemistry majors will be interviewed and their satisfaction with the instructional program evaluated.

Findings:

It was found that most students were satisfied with the instructional program. A few students had indicated that it would be helpful if, in the future (space permitting) the Chem. And Biochem. Dept. provided additional space for meetings, studying, and a computer lab room for students.

How did you use findings for improvement?

In this respect, the Department has provided additional tables and chairs in the atrium space of the Chemistry building for the students to use for study purposes. This space has also been made available for students to have meetings and for tutoring. Classrooms have also been made available for use in the evenings.

Additional comments:

None
Expected Outcomes : 2. Problem Solving Skills

Students will acquire problem solving skills that are relevant to a broad spectrum of carers.

Related typical general education outcomes:

2  Analytical and Critical Reading
4  Ability to Construct Arguments
6  Ability to Solve Open-Ended Problems

Assessment methods

Method :  2a. Standardized Tests

Standardized tests in one or more of the areas of chemistry (provided by the American Chemical Society) will be given to undergraduates and deficiencies noted to modify undergraduate lectures in each area of chemistry to enhance student performance.

Findings:

Students in the B.S. have performed well on these standardized tests and been able to achieve an average score within 15% of the national average.

How did you use findings for improvement?

The areas of chemistry covered have changed with new advances in each area of chemistry and instructors have used new material in their lectures to improve the course content of the Department.

Additional comments:

Textbooks, that reflect new advances in all areas of chemistry, are used to keep the course content current. This is done by textbook committees in each Departmental division.

Method :  2b. Exit Questionnaire

An exit questionnaire (student/alumni survey) will be completed by B.S. graduates at the time of graduation.

Findings:

The feedback indicated a general satisfaction with the curriculum and instruction. They were pleased with the laboratory teaching facilities in the recently constructed science technology building.

How did you use findings for improvement?

Comments of merit concerning curriculum and instruction have been recorded for future follow up.

Additional comments:

None

Expected Outcomes : 3. Chemical Principles

Students will acquire a basic knowledge of chemical and biochemical principles relevant to each of the areas of chemistry.
Related typical general education outcomes:
2  Analytical and Critical Reading
9  Informed and Engaged Citizenship
11 Scientific Literacy

Assessment methods

Method: 3a. Departmental Exam
Graduate students will be given a Departmental exit exam which will cover basic and general knowledge retained from coursework in each of the areas of chemistry.

Findings:
It was found that most students did well and the average score was within 15% of the national average on the exam.

How did you use findings for improvement?
These results will provide a baseline for the evaluation of future results obtained from the exam (s standardized American Chemical Society exam over general undergraduate chemistry).

Additional comments:
Any decline in performance from these high standards will be reported to the Departmental curriculum committee.

Method: 3b. Feedback Interview
Graduating students will be interviewed and their satisfaction with the B.S. degree program evaluated.

Findings:
It was found that most students were satisfied with the course offerings in the B.S. degree program.

How did you use findings for improvement?
The Department has future plans to add additional courses to the honors program. We think this will further enhance the undergraduate course offerings.

Additional comments:
None