

**Major Field Assessment Plan
B. S. Science Education (Biology)**

The mission of Southeastern Louisiana University is to meet the education and cultural needs, primarily of Southeast Louisiana, to disseminate knowledge and to facilitate life-long learning through quality instruction, research and service in a safe, student-centered environment.

The purpose of the B.S. in Science Education (Biology) is ...

Goal 1

Biology education majors at Southeastern Louisiana University will acquire fundamental and advanced concepts, principles and applications of historical and contemporary biological content knowledge.

A. Expected Outcome

Graduating seniors will compare favorably with similar students nationwide in their knowledge of biological principles.

Assessment

- a. All biology majors, upon taking biology seminar, will be given a locally developed multiple choice exam, and at least 85% will score above 75.
- b. On the Department Exit Survey, at least 80% of the graduating students will indicate that they received at least an adequate preparation in each area of biology assessed by the questionnaire.
- c. Biology Education students will compare favorable with students from other universities in their performance on the PRAXIS examination

B. Expected Outcome

Students who wish to continue their education will be adequately prepared to pursue a graduate degree in a pedagogy or biological field.

Assessment

- a. At least 70% of the graduating seniors will indicate on the Southeastern Exit Survey that they feel adequately or well-prepared to seek further education.
- b. Students who indicate on the Undergraduate Alumni Survey that they are seeking a graduate degree in a biological science, will indicate that they are “satisfied” or

“well satisfied” with their instruction in the major and when they compare themselves with alumni from other institutions, they believe their preparation at Southeastern was “better” or “about equal”.

Goal 2

Biology education majors at Southeastern Louisiana University will acquire process skills that are necessary to design, supervise, and conduct biological research in a meaningful and safe manner.

A. Expected Outcome

Senior students will have good written and oral communicative skills. These include being able to conduct a literature search, read and interpret scientific literature, including charts, graphs, and tables, and write a grammatically correct, scientific report. In addition, these students will be able to develop and conduct an oral presentation on a biological topic.

Assessment

- a. Senior students will present a well organized scientific seminar as part of Biology 441. This presentation will be evaluated by two members of the faculty.
- b. Students enrolled in Biology for Teachers will develop and conduct a class on a selected issue in the biological sciences such as safety in the classroom, evolution, in the schools, and science fairs to a class of their contemporaries.

B. Expected Outcome

Biology Education majors should know and be able to apply basic laboratory skills in Botany, Zoology, and Microbiology including laboratory safety, developing, conducting, and performing experiments using the scientific method, using basic laboratory equipment, synthesizing, evaluating, and arranging data into meaningful tables, charts, and graphs.

Assessment

- a. Students in the Biology for Teachers course will pass an instructor-developed safety in the classroom and laboratory examination with 90% accuracy.
- b. On the departmental exit survey, at least 80% will indicate they are satisfied with their preparation in basic laboratory skills.

Goal 3

Biology Education majors will foster a positive attitude toward science and scientists.

A. Expected Outcome

Graduating seniors in Biology Education will have a positive attitude towards science and scientists. In addition, these students will have an understanding of science in society.

Assessment

- a. On the Southeastern Exit Survey, at least 80% of the graduating seniors will indicate that their attitude towards science and scientists in general, and biology in particular is positive.
- b. In the Biology for Teachers course, participants will conduct a survey on factors that foster positive towards science and scientists.
- c. In the Biology for Teachers course, students will be able to indicate the role of science in society. In addition, the students will be able to discuss biological and scientific applications.

Goal 4

Biology Education majors will have an opportunity to work with members of the faculty.

Expected Outcome

Graduation seniors in Biology Education will have an opportunity to participate in research, field trips, and educational projects with specific faculty members.

Assessment

- a. On the Southeastern Exit Survey, 90% of graduating seniors will indicate that they are satisfied with the friendliness and helpfulness of faculty.
- b. On the Southeastern Exit Survey, 90% of students will indicate that they are satisfied with the opportunities to interact with faculty outside of class.

Goal 5

Biology education majors at Southeastern Louisiana University will process

A. Expected Outcome

Biology education majors will be provided with the skills and knowledge needed to teach.

Assessment

- a. At least 90% of the graduates will score at least a 4.0 on the appropriate indicators of the Student Teacher Evaluation Form.

- b. At least 90% of the graduates will rate the components of the teacher education program as satisfactory or better on a survey of graduates.
- c. Students will be able to successfully apply computer technology in the classroom including ongoing PowerPoint presentations.

B. Expected Outcome

Students will be able to demonstrate knowledge of non-instructional aspects of education such as growth and development, learning theories, history and philosophy of public education, and technology for the classroom.

Assessment

At least 95% of the graduates will score at least 645 on the Professional Knowledge portion of the NTE.

Note:

Students participating in the Bachelor of Sciences program in Biology Education at Southeastern Louisiana University are exposed to cultural and global perspectives through their participation in coursework, practica and student teaching in multi-cultural public school environments, participating in science fair, olympiads, district rallies and other community experiences, as well as an opportunity to study in Costa Rica. Biology education majors will also develop essential global environmental perspectives through select courses.