Major Field Assessment Plan B.S. Physics

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 Physics is to prepare students for graduate study in Physics and in other fields that require considerable scientific knowledge and laboratory experience, and/or to train physicists for employment in industry.

Goal 1

To provide students with knowledge in the field of physics.

A. Expected Outcome

Students completing the undergraduate program in physics will compare very favorably on a national basis with other seniors graduating in physics.

Graduates will be able to demonstrate problem-solving and laboratory skills in the areas of classical mechanics, thermodynamics, electricity and magnetism, optics, special relativity, quantum mechanics, and statistical mechanics.

Assessment

Fifty percent of the graduates in the physics program who graduate with a cumulative GPA of 2.00 - 2.99 in their major will score above the 33rd percentile on the ETS physics field assessment. Fifty percent of the graduates in the physics program who graduate with a cumulative GPA of 3.00 - 3.49 in their major will score above the 50th percentile on the ETS physics field assessment. Seventy five percent of the graduates in the physics program who graduate with a cumulative GPA above a 3.50 in their major will score above the 50th percentile on the ETS physics field assessment.

B. Expected Outcome

Graduates will respond very favorably to the physics curriculum and overall learning environment.

Assessment

a. Ninety percent of the graduates in the physics program will be satisfied with their physics instruction, as indicated on the Southeastern Exit Survey.

Goal 2

To develop a comprehensive understanding of the professional aspects of physics.

Expected Outcome

Students completing the undergraduate program in physics will demonstrate awareness of the diverse nature of physics and its applications as a body of knowledge and the importance of participation in professional societies, professional meetings and undergraduate research in the field of physics.

Assessment

Eighty percent of the graduates from the physics program will feel they were given opportunities and support for attending professional physics meetings and participating in undergraduate research while a student at Southeastern as evidenced by the Southeastern Exit Survey.

Goal 3

To prepare students for career-based employment and/or graduate study.

. Expected Outcome

One year after graduation, the majority of graduates will have career-based employment or will be in graduate school.

Assessment

At least sixty percent of the graduates of the physics program will have career employment or will be enrolled in graduate school as evidenced by the Southeastern Physics Post Exit Survey.

Note

Physics majors receive a multicultural global perspective through their foreign language requirement, their participation in the seminar program, their involvement in undergraduate research, and by their attendance and presentations at professional meetings.

GOAL ATTAINMENT FRAMEWORK

B.S., Physics Department of Physics and Physics

Academic Years 2005-2006, 2006-2007

December 14, 2005

Expected Outcome	Much Less than Expected	Less than Expected	Expected	More than Expected	Much More than Expected
% of graduates with a cumulative GPA of 2.00-2.99 scoring above the 33 rd percentile on the ETS Major Field Achievement Test in Physics	Expected	Expected	75%	Expected	Expected
% of graduates with a cumulative GPA of 3.00-3.49 scoring above the 50 th percentile on the ETS Major Field Achievement Test in Physics			75%		
% of graduates with a cumulative GPA above 3.50 scoring above the 66 th percentile on the ETS Major Field Achievement Test in Physics			75%		
% of graduates satisfied with their physics instruction, as indicated on the Southeastern Exit Survey			90%		
% of graduates who feel they were given opportunities and support for attending professional physics meetings while a student at Southeastern as evidenced by the Southeastern Exit Survey			80%		
% of graduates who have career employment or will be enrolled in graduate school as evidence by the Southeastern Physics Post Exit Survey			60%		