

**Department of Physics**  
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Degree Programs Assessed	Assessment Methods	Number of Individuals Assessed
B.S. (Physics)	Exit Interview Reports Student Course Evaluations Alumni Survey (Informal)	5
M.S. (Physics)	Exit Interview Reports Student Course Evaluations Alumni Survey (Informal)	1
M.S. (Photonics)	Exit Interview Reports Student Course Evaluations Alumni Survey (Informal)	1
Ph.D. (Physics)	Exit Interview Reports Student Course Evaluations Alumni Survey (Informal)	1

**Analysis and Findings**

We received voluntary exit interview reports from five of the seven B.S. students who graduated over the review period. The report indicated that the students agreed that they had received adequate preparation to find employment in physics or to enter an acceptable graduate program. The students also agreed that the courses in Physics met their academic needs, but suggested the need for more elective courses to choose from. Two of the students were very appreciative of the summer NSF Research Experience for Undergraduates. One student commented that the opportunity for undergraduates to conduct research at OSU is something that he has not heard of at other universities. Another student commented about the need for classrooms to be multimedia ready (we are in the process of doing this with two lecture rooms in Physical Sciences). Course evaluations by graduating seniors overall indicated a positive class experience.

Three graduate students returned exit interview reports. Two of the exit interviews for graduate students with advanced degrees in physics indicated that they had received adequate preparation for their degree, and, in general, the department had met their needs and satisfied their intellectual curiosities. The one graduate student with the M.S. degree with specialization in photonics stated that there was a shortage of good research in the photonics program. The student receiving the Ph.D. stated that a better interaction is needed between professors and graduate students in research, teaching and in social activities. The student further stated that the quality of teaching at the graduate level needs to improve.

Our exit interviews and informal surveys also indicated that all of our graduates are finding appropriate job or continuing graduate education opportunities available to them.

**Uses of Assessment Results**

We have several actions planned based on our outcomes assessment process as well as on other assessments of Department needs over the past year.

- In conjunction with CEAT efforts for ABET recertification, we have changed both the course content and title of our PHYS 3313 course (effective Spring 2005). The course is now titled "Introduction to Semiconductor Device Physics" and covers both modern physics and introductory semiconductor physics.
- With the hiring of a Chaired professor and a junior faculty member, we are planning on teaching more upper level undergraduate and graduate physics courses.

- Assessment results of our two algebra based general physics courses have led to a changing of the teaching format for these courses from two lectures plus one recitation per week to three lectures per week. This will be initiated for PHYS 1114 during the Fall 2004 semester and for PHYS 1214 during the Spring 2005 semester. In conjunction with CEAT, we are assessing similar changes for our calculus based general physics courses.
- The Departmental review of our calculus based general physics service courses has resulted in establishing recommended syllabi and course contents for these two courses. This has been conducted in conjunction with CEAT efforts for ABET recertification.
- The Department will begin assessing new teaching methods for select general physics courses. These new teaching methods are included in our Departmental Strategic Plan which has been approved by our faculty. This will begin in the Fall 2004 whereby personal response devices will be issued to students in these courses to assess the conceptual understanding of physics laws and principles.