

Department of Physics and Physical Oceanography Goals, Objectives, and Assessment

Goal 1: To provide quality instruction that reflects teacher effectiveness and scholarship.

Objectives / Strategies:

1. Enhance professional development of faculty by promoting and supporting travel to professional workshops and conferences, and rewarding scholarly accomplishment.
2. Improve classroom learning by employing the latest technological advances and encouraging the use of alternative pedagogical techniques.
3. Strengthen recruiting efforts to attract new faculty who value both teaching and scholarship.

Assessment:

1. Monitor budget allocations and expenditures for travel. Maintain records of faculty publications, presentations, and grants, and base merit increases, in part, on scholarly accomplishment.
2. Evaluate faculty teaching effectiveness using approved student and peer instruments, and base merit increases, in part, on teaching effectiveness. Survey graduating seniors to ascertain their level of satisfaction with instruction in the major.
3. Assure that statements of teaching philosophy and research plans are submitted by applicants. Observe interview candidates in a “live” classroom setting.

Goal 2: To offer academically strong programs that prepare undergraduate students for careers in the workplace, or for graduate study in Physics and related disciplines.

Objectives / Strategies:

1. Maintain a curriculum that is current and complete, developing new courses (non-traditional, interdisciplinary, etc.) and degree paths as circumstances warrant.
2. Expand opportunities for student participation in faculty research.
3. Enhance experiential learning by increasing internship opportunities and improving the pedagogy in undergraduate laboratories.
4. Increase student exposure to unique and challenging problems in the discipline through honors work, in concert with the University Honors Program.
5. Increase the number of majors in the discipline to sustain the “critical mass” needed to promote healthy peer discussion and vigorous exchange of ideas, by actively recruiting the best students from the introductory courses.

Assessment:

Adopted 10/11/2000

1. Compare degree requirements and curriculum offerings with those of “benchmark” institutions and other recognized model programs. Survey alumni every five years concerning their perceptions of strengths or weaknesses in department programs and offerings.
2. Maintain records of student presentations at professional gatherings, and of work submitted in partial fulfillment of the honors degree requirement, PHY 499.
3. Maintain a list of approved internship sites. Review the effectiveness of the undergraduate laboratories by comparing critically our practices with those at other institutions and by soliciting and interpreting students' perceptions of their laboratory experience. Survey graduating seniors to ascertain their satisfaction with the laboratory experience.
4. Monitor enrollments and student activities in departmental honors offerings.
5. Monitor the number of UNCW Physics majors and minors and compare with those of “benchmark” institutions. Maintain records of graduate school acceptances and job placements.

Goal 3: To provide service in the discipline to the Department, the University, the region, and the global community.

Objectives / Strategies:

1. Maintain, review, and expand as necessary those [service] course offerings that meet the needs of other campus departments.
2. Continue an active seminar and colloquium series that brings cutting-edge developments in diverse areas of Physics and related fields before practicing professionals and the general public.
3. Expand public outreach via faculty participation in community-sponsored events where faculty expertise is sought, and rewarding such involvement.

Assessment:

1. Monitor the enrollment in service courses, both in absolute numbers and as a percentage of University enrollment. Survey client departments to gather suggestions for modifying course content, adding new courses, etc.
2. Maintain annual record of colloquium speakers and titles of presentations, to assure sufficient expertise and reflect the desired balance between specialty talks in diverse fields and general-interest topics.
3. Maintain a record of faculty service to the Department, University, and the community, and base merit increases, in part, on the service contributions of faculty.