Master Syllabus Department of Physics and Astronomy



PHYC 479 Practical Experience

Course Description

Unpaid Work/learning experience in applied or theoretical physics in an institutional, industrial or university research/development setting. (1-3 semester hours)

Prerequisite: approval of proposed program by the department chair.

A total of 3 hours of credit may be earned.

Course Objectives

The purpose of this course is to recognize "on the job" learning of physics which complements or supplements classroom and university laboratory experiences. Examples of programs which are considered appropriate for university credit are research participation in a government or industrial research laboratory devoted to scientific or technical problem solving. In such an approved program there is a significant, variegated, and challenging learning experience for the student as opposed to merely routine and repetitive technical tasks.

Course Rationale

PHYC 479 is designed to provide the student with an opportunity to integrate his or her university experience with a practical learning experience in applied, experimental, or theoretical physics outside the Department of Physics and Astronomy. University credit is given for such programs as practicums, internships, and cooperative education programs which serve to complement the student's regular academic program. The course is not intended to displace regular academic work; its purpose is rather to recognize "on the job" university laboratory experiences.

Examples of programs which are considered appropriate for university credit are research participation in a government or industrial research laboratory, an industrial setting where there is a significant application of physics to practical problems, and an internship in a governmental or private agency devoted to a scientific or technical problem solving. In all cases it is understood that no salary or stipend will be paid. In such an approved program there is a significant, variegated, and challenging learning experience for the student as opposed to merely routine and repetitive technical tasks.

Course Content, Format, and Bibliography

Content

Content and format of the course will vary according to the individual work/learning program. Specific course objectives and evaluation will be proposed by the student and his faculty advisor for approval by the department head.

Methods of Evaluating Student Performance: The final grade in the course is based upon such factors as (1) the employer's evaluation of student performance, (2) the student's written work reports. Course

requirements may include such demonstrations of the work/learning experience, where appropriate, as an examination, the keeping of a daily journal or logbook, the submission of a final report, or the publication of an oral presentation at a scientific meeting or a paper in a scientific journal.