

Assessment Report

Department of Physics

Friday, September 15, 2000
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Progress at the Undergraduate Level 99-00

- We developed a plan for a course in General Relativity to be given at the undergraduate level.
- We prepared a plan to offer Physics 109 during the summer session. We have searched for additional laboratory space for this course initially in Sterling, but in the long term this expansion must be accommodated in Chamberlin hall.
- We have initiated discussions concerning the Chamberlin renovation in identifying the needed space for the relocation of laboratories, lecture halls, discussion rooms.
- We are pleased to report that we have added Dr. M. Briggs to assist in undergraduate revisions. We modified and adapted the laboratory manuals to the modernized syllabus for Physics 201 that includes computers.
- We developed a proposal for modernization of the laboratories for Physics 202, Physics 247/8/9, and Physics 307 prioritized in that order.
- We continued, with some difficulty, to acquire support for the Peer Mentoring Tutoring Program. We are delighted to continue to involve Dr. S. Nossal as Director. Anecdotal evidence indicates that there are fewer low grades and failures, perhaps as a result of the program.

Majors:

- We continued to develop of a new first year course for majors (Physics 247/248/249). The proposed course sequence was approved by the Department and the Physical Sciences divisional committee. Although it is being offered in the fall 2000 semester for the first time, support for the development of the laboratory (requested through the Laboratory Modernization Program) was not available. We were successful in recruiting a full cadre of students for the initial offering.
- We have worked with SOAR to advise incoming students concerning Physics majors. In addition we will try to encourage majors to sign up earlier than is current practice. Many wait until their senior year for no reason apparent to us.
- We intend to extend our outreach program using tours/open house program, brochures, high school programs *etc.* in order to recruit undergraduate majors.

Progress at the Graduate Level 99-00

- Based on information obtained in interviews with students we implemented a plan to insure the Qualifier Examination is consistent in difficulty and in evaluation and to provide continuity in part by review and in part by longer terms for Committee members.

Plans for 2000/01

- We hope to continue the Peer Mentoring Program. However, to do this we must identify sources of continuing funding. We intend to prepare a proposal to the National Science Foundation. In the long term we would like to develop a Physics Learning Center patterned after the successful Center in Chemistry.
- We will continue to use student questionnaires to learn what we are doing well and where adjustments are needed. Then we will insure the necessary changes are accomplished.
- We intend to monitor and evaluate the new sequence for majors (P247/8/9) to be sure that it is fulfilling our expectations.
- We wish to re-establish P433 (Computational Physics). This will require identifying a clientele and constructing an attractive syllabus.
- We will investigate through SYMBIOSIS and the LINK program ways to meet the needs of other majors (biology and engineering).

Challenges

- Funding must be found to continue the Peer Mentor Program and possibly to expand it to a Physics Learning Center serving all students in the introductory courses.
- We must attempt to identify sufficient space for additional courses (P109; P433...) as well as the necessary consultation, the learning center and other needs.
- We must acquire the necessary funds to modernize P202 laboratories and to stock the Physics 247/8/9 laboratories. In the future to keep the installed infrastructure from becoming obsolete, the computers in the laboratories should be amortized over no more than four years.