

## Physics Department Mission

The Physics Department is dedicated to the dissemination and promotion of the discipline of physics through instruction, research, and outreach. Instructionally, we aim both to furnish rigorous training for students pursuing a career in physics and to provide broad, solid exposure to physics principles and practices through service courses for those students whose interests peripherally involve physics.

At the undergraduate level, we offer courses of study for students majoring in Physics, for students majoring in Applied Math and Physics, and for students pursuing a dual major in Physics and a closely related engineering discipline. We also offer a series of courses in Astronomy. For physics majors, our primary goal is to equip students to succeed in a physics career by providing training necessary either for further study at the graduate level or for an entry-level technical position. After completing a major in physics, we expect that students will have:

- Attained a broad training in the principles and methods used to analyze physical phenomena.
- Developed a critical ability to frame and answer questions about the physical universe.
- Been exposed to experimental as well as theoretical bases used to investigate nature.
- Developed the ability to synthesize and communicate scientific information.

For service courses aimed at allied disciplines, such as engineering or pre-medical studies, our goals include a thorough grounding in the principles that undergird technical endeavors. For service courses aimed at meeting general education requirements, our goals include equipping citizens to appreciate the fact that nature behaves in a regular and understandable fashion.

At the graduate level, we provide advanced general and specialized courses and research guidance for students enrolled in the Masters and Ph.D. programs. We also mentor postdoctoral fellows. The Department is committed to the advancement of physics through creative scholarship. We are actively involved with the larger physics community via activities such as refereeing and participating in national and international conferences.

Outreach activities are also a vital part of our mission. We run a popular Planetarium program for the general public, and our faculty are regular participants in the Science Bag program, which was initiated in our department. In the summers, we run a program sponsored by the National Science Foundation to provide research experiences to undergraduates and to local high school teachers.