

Mission Statement

The mission of the Physics Department at Slippery Rock University is to service the Liberal Studies Program, provide content courses for other departments, and provide high-quality major and pre-engineering programs. The department is equally committed to each of these three areas and is actively involved in curriculum and program review on an ongoing basis. With regards to the Liberal Studies Program, the department aims to offer courses that compliment the "Seven Critical Goals Towards Becoming an Educated Person." The department also offers many courses that provide basic and advanced content to students with other majors. Finally, the department aims to provide major programs that allow technical specialization and flexibility to its graduates. Many possible career options are available to physics majors; the department's curriculum provides the training necessary to many of these options.

The basic educational philosophy of the department is the development of students' professional and technical skills. The educational focus of the major programs is to facilitate the students' entry into the physics community. To accomplish these goals, the course work in the department emphasizes the traditional areas study: content mastery, observation of phenomena, problem solving skills, and laboratory experiences. While these traditional areas of study are obviously important, the department also recognizes that graduates need skills that enable them to adapt to the changing work place of the 21'st Century. Thus, the department recognizes that experiences that develop writing and speaking skills, teach techniques of library research, and develop an attitude of self-reliance are worthy educational goals. While the department's educational focus for the other populations of students served is also to introduce the appropriate physics content, the department also views physics as a liberal art. As such, the department encourages students to explore science as a creative endeavor and to consider the relationship between science and relevant societal and technological issues.

Program Outcomes

1. Understand basic and advanced concepts of classical and modern physics.
2. Apply inductive and deductive logic, the scientific method, and other methods and principles of physics to a broad range of problems.
3. Help graduates reach their specific career goals by preparing them for graduate or professional school, for teaching positions, or for jobs in industry or research.