

## **PHYC 390 Honors Colloquium in Physics**

### **Course description**

Honors Colloquium in Physics. (1)

Exploration of selected topics in physics, with emphasis on individual projects, study, and discussion.

Open only to honors students or students with permission of department chairperson.

A total of 3 hours of credit may be earned.

### **Course Objectives**

The course will provide students with the opportunity to learn about the underlying principles and fundamental theories of physics within the context of societal issues. Upon completion of this course the student will be able to utilize the concepts of mechanics, electricity and magnetism, optics, thermodynamics, atomic, molecular and nuclear structure, quantum theory and theory of solids in discussing phenomena that are relevant to current events.

### **Course Rationale**

This course emphasizes either course work/classroom instruction or research skills, or both. This course will be taught by persons with special research and/or instruction competencies and interests. Students will develop skills associated with presenting issues in both oral and written form.

Informed citizens must understand the fundamentals of the interactions among science, technology and the rest of society if they are to control their known destinies. Too often technical decisions made by "the experts" profoundly influence our daily lives. Obviously every student cannot become an expert in all areas of science but each student can acquire the skills needed to judge the validity of conclusions of professional scientists and engineers. Just as one need not be a musician to enjoy music nor an author to enjoy poetry, one need not be a scientist to understand how sciences and technologies develop and operate and the ways in which they interact with the society which employs them.

### **Course Content, Format, and Bibliography**

Varies depending on topic.