OPTI 489/589 OPTICS OUTREACH

Description: Grade (489/589), or Pass/Fail (489A/589A), Credit (1). Students will explore a variety of methods for communicating with the general public about science and optics in particular. Students are expected to develop and apply the knowledge and skills useful for developing methods for communicating effectively with a wide range of audiences. The primary audience for applying the skills acquired in this course will be communicating with students in the high school setting.

Instructor:
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Course Objectives/Outcomes:

At the completion of this course students will be able to:

Understand principles of informative communication
Demonstrate the ability to organize
Understand, as well as participate in public speaking projects
Be familiar with a variety of audio-visual applications
Demonstrate effective presentation skills to audiences in an educational setting
Create an individual optics project for demonstration purposes

Both undergraduate and graduate students are required to be involved in at least three oral presentations at schools or outreach events. Each student must be the primary presenter at one or more of the three presentations, and add new material and demos. The new material will be presented in class in their final project presentation.

The graduate level independent project includes a 3-page writing assignment and presentation about a topic relating to optics (theory or applied).

Study Skills and Assignments:

This course requires some assignments, both in and out of class, in order to clarify expectations and to review the progress of projects, e.g., PowerPoint presentations, displays, and projects for demonstration purposes. Special emphasis will be placed on team projects and the importance of teamwork and how well designed organization and communication strategies promote successful results. Assignments and projects are expected to be turned in on time and an overview of presentations given to the public are to be turned in to the instructor within a week of the project.

Grading Criteria:
Undergraduate:
Presentations to the public: 40%
Group Assignments: 20%
Course Project: 20%
Final project presentation: 15%
Attendance: 5%

Graduate:
Presentations to the public: 40%
Group Assignments: 15%
Course Project: 20%
Independent Project: 10%
Final project presentation: 10%
Attendance: 5%

Grading Scale for P/F:

100-60=Pass | Below 60=Fail

Materials for Course:

A variety of materials from the instructor
Materials as a result of student research
Class Notes from Instructor