OPTI 423L/523L- Optomechanical Engineering Laboratory

Course Description:
In this class students will work on independent projects involving design, analysis, hardware development, testing, and evaluation. Class meets weekly for assignment, planning and review of the projects. Beyond the class, the students will schedule time in the Optomechanics Laboratory where they have access to necessary equipment and instruction. Students will be required to present their work to the class, and to provide written documentation. This class is for students that have a good command of the principles of optomechanical engineering as taught in OPTI 421/521 and OPTI 421L/521L.

Textbooks:
- Course Notes Available on the optomech web site.
- Burge, J. H. OPTI 421/521 Course Notes.
- Vukobratovich, D. and S. Introduction to Opto-Mechanical Design.

Special Materials
Each student must maintain a bound laboratory notebook that they use for this class. All activities must be recorded in this notebook.

Class will be coordinated using the class website, were all presentation materials and reports will also be published.

Grading Policy:
The grade for the class is assigned based on the following:

- Initial Project Review 20%
- Design Review 25%
- Final Project Review 35%
- Class Participation 20%

This class is available for graduate or undergraduate credit. Graduate students are expected to work independently. Undergraduate students will work as part of a team.

Objectives
• Experience with hardware such that each student should demonstrate proficiency with common procedures and equipment.
• Demonstrate professional skills for planning, executing, and reporting hardware-intensive tasks.
• Expertise in one particular area. Each student will become an expert at the particular area of their choosing.
• Exposure to a wide variety of disciplines, both from their peers and from ongoing activities at UA.