

Optical Shop Practices

OPTI 597A

Prof. Jose Sasian

Syllabus



Syllabus OPTI 597A

Instructor:

- Jose Sasian
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- OSC Room 106B
- 520 621 3733

Course goals:

- Design, Fabricate and Test optical surfaces
- OPTI 597A is mainly a hands-on course

Schedule:

- TTh, TBD



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References:

- Class notes
- Optical Fabrication books in the optics shop room

Office hours

- By email appointment



THE UNIVERSITY OF ARIZONA

James C. Wyant

College of Optical Sciences



Learning Outcomes

- Explain optics shop safety
- Explain glass beveling
- Explain curve generating with abrasives
- Explain surface fine grinding
- Explain types of abrasives
- Explain subsurface damage
- Explain surface roughness
- Explain surface polishing
- Explain how a spherometer works
- Explain surface figuring
- Explain the sag of a conic mirror
- Explain null testing
- Explain the Ronchi test
- Explain the Fizeau interferometer
- Explain surface description with Zernike polynomials
- Explain mirror verification with a lens design program



Academic Integrity

- **Academic Integrity**
According to the Arizona Code of Academic Integrity (<http://dos.web.arizona.edu/uapolicies/cai2.html>), “Integrity is expected of every student in all academic work. The guiding principle of academic integrity is that a student’s submitted work must be the student’s own.” Unless otherwise noted by the instructor, work for all assignments in this course must be conducted independently by each student. CO-AUTHORED WORK OF ANY KIND IS UNACCEPTABLE. Misappropriation of exams before or after they are given will be considered academics misconduct.

Misconduct of any kind will be prosecuted and may result in any or all of the following:

- * *Reduction of grade*
- * *Failing grade*
- * *Referral to the Dean of Students for consideration of additional penalty, i.e. notation on a student’s transcript re. academic integrity violation, etc.*

Students with a Learning Disability

If a student is registered with the Disability Resource Center, he/she must submit appropriate documentation to the instructor if he/she is requesting reasonable accommodations. (<http://drc.arizona.edu/instructor/syllabus-statement.shtml>).



Face coverings are required in our classroom: Per UArizona's [Administrative Directive](#), face coverings that cover the nose, mouth, and chin are required to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios). Any student who violates this directive will be asked to immediately leave the learning space, and will be allowed to return only when they are wearing a face covering. Subsequent episodes of noncompliance will result in a Student Code of Conduct complaint being filed with the Dean of Students Office, which may result in sanctions being applied. The student will not be able to return to the learning space until the matter is resolved.

