

Department of Physics and Astronomy

Optics (Physics 342) Syllabus

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Text book: Introduction to Optics, 3rd Edition, by Pedrotti, Pedrotti and Pedrotti

Publisher: Prentice Hall

Chapters 1: Nature of Light

3: Geometrical Optics

6. Optical Instrumentation

8: Wave Equations

9: Superposition of Waves

10: Interference of Light

12: Coherence

13: Holography

15: Production of Polarized Light

16: Fraunhofer Diffraction

18: Fresnel Diffraction

21: Laser Basics

The course grade is based on the following (assuming that all the midterms are taken): Quizzes 10%, midterms 50%, final 40%. There will be two midterms. Each will count for 25%. There will be no makeup midterms. If a student misses one midterm for a valid reason, the course grade will be based on the exams taken, with homework plus final still counting for 100% of the course grade.

The homework must be handed in one week after the chapter ended. They will be checked but not corrected. The solutions will then be handed out.