Physics 571: Laser Physics
Fall Semester 2004, MWF 9:00-9:50AM, C266 ESC

Instructor: Justin Peatross, N263 ESC, 422-5043, peat@byu.edu
Office Hours: MWF 9:00AM-10:30AM
Laboratory: S415A ESC
Textbook: Lasers, Peter Milonni and Joseph Eberly

Grade: 45% Homework & Labs, 5% Participation, 30% Exams, 20% Final Exam

Chapters
14. Laser Resonators
2. Classical Dispersion Theory
3. Classical Theory of Absorption
17. Introduction to Nonlinear Optics
18. Nonlinear Optics: Higher-Order Processes
Exam I
8. Semiclassical Radiation Theory
7. Emission and Absorption Rate Equations
10. Laser Oscillations: Gain and Threshold
11. Laser Oscillations: Power and Frequency
12. Multimode and Transient Oscillations
Exam II
15. Optical Coherence and Lasers
16. Some Laser Applications

Final Exam: Thursday Dec. 16, 11:00AM-2:00PM.

Homework sets with occasional laboratory exercises will be due with each chapter.