Physics 158 Syllabus (green sheet)

Fall 2006

I. Course Information

- San José State University
- Physics 158, (T-Th, 10:30-11:45, SCI 242)
- Fall 2006
- Web site http://sjsu.webct.com/public/phys158f06pb/
- Dr. Peter Beyersdorf,
  - Office: SCI 235
  - Phone:924-5236
  - Email: pbeyersdorf@science.sjsu.edu
  - Office hours:
    - T Th 9:00-10:15 in my office (SCI 235)
    - T Th noon-1pm at student union (by Jamba Juice)

Course Description:

> "Physics 158: Optics." This class is an introduction to optics. It covers the propagation of light, geometrical optics, polarization, interference, and diffraction.

Student Learning Objectives:

> On successful completion of this course students shall be able to: Understand the operating principles of passive optical elements such as mirrors, lenses, diffraction gratings and relate observables of interference fringes to physical phenomena such as source wavelength and index of refraction changes.

Prerequisites: Phys 72 or Phys 52; Math 32.

Textbook and required materials

> Eugene Hecht "Optics, 4th edition"

Course Requirements, Percent of Grade

You will be graded on the following 4 items, each graded on a curve, to produce 5 scores (5 because the final is weighted twice as heavily as all the other parts) as shown

- Weekly Homework
- Midterm #1
- Midterm #2
- Final Exam (x 2)

Your lowest homework score will be dropped and not included in your homework average. There may be occasional extra credit opportunities announced in class.

Grading Method

Homework will be assigned on a weekly basis. You are free to work on homework in groups and can even turn in a single homework set for a group of up to three people (in which case all members of the group will receive the same grade).

Midterms and the final exam will test your ability to apply what you have learned to different (and sometimes unfamiliar) situations. It is your responsibility to convince me you have a conceptual understanding of the subject matter by solving test problems in a clear and concise manner that shows the logical steps leading to the final answer. Work will be graded on the quality of your solution, not just the correctness of your answer. A complete solution will not necessarily be required to receive partial credit on any problem.

Late Homework and Missed Exams

Homework will be at the beginning of class on the due date. Late homework is not accepted.

Exams will be given in class during scheduled hours and will not be rescheduled. If you have a known conflict please speak to me in advance.

Description of Assignments and Exams

Homework will be assigned on a (roughly) weekly basis. It will consist mainly of problems in the textbook, and is designed so that the average student can complete it in less than 3 hours. I encourage you to work with others on homework. Each midterm will focus on, but not necessarily be limited to, the material covered since the last midterm. The final exam will be a comprehensive exam for the whole term with a slight focus on material presented since the final midterm.

Class Exam Schedule

10/05	Midterm #1
11/09	Midterm #2
12/12	Final Exam 9:45-12:00 am, SCI 242

On-line and Electronic resources

This class relies on students' use of online and electronic resources. The main online resource is the class web site, available at http://sjsu.webct.com/public/phys158f06pb/. This site requires users login. Your username is your student ID number with the leading two zeros replaced by a capital 'W'. Your default password is 'fall', and can be changed after your first log in. Once logged in you please set your contact email. I will use this contact information for occasional important announcements. It is your responsibility to ensure that it is kept accurate and up-to-date. Electronic copies of class lectures, lecture notes and homework solutions will be posted on this site, as well as all other class material that needs to be distributed. Additionally there is a discussion forum hosted at this site. Please use this forum to post questions relating to homework or class for the class and/or professor. Also, please offer responses to others inquiries when possible. Please show the same etiquette online that you would show in a face-to-face discussion with other classmates. Flames or other offensive postings will not be tolerated. Once logged into this web site you can view your entry in my grade-book to track your score in the class and ensure its accuracy.

II. University Policies

A. Academic Integrity Statement

"Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's Integrity Policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Judicial Affairs." The policy on academic integrity can be found at:

HYPERLINK "http://sa.sjsu.edu/judicial_affairs/index.html" http://sa.sjsu.edu/judicial_affairs/index.html

Summarized here: if you cheat and are caught you will face tangible consequences. If you cheat and are not caught you will have the hellish intangible consequence of roaming the earth for the rest of your life burdened by the soul of a cheater.

B. Campus policy in compliance with the Americans with Disabilities Act

"If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with the DRC to establish a record of their disability."

III. College and Departmental Policies

You are responsible for understanding the policies and procedures about add/drops, academic renewal, withdrawals, incompletes, classroom behavior, and other policies described in the catalog. Please read your catalog thoroughly.

IV. Class Rules

Place your personal electronics in quiet mode, and refrain from using them in the classroom for non-class related work. Help each other out. Provide me lots of feedback so I can improve the class. Have fun!