PHYS122A Autumn 2007 MWF 8:30-9:20 PAB118

Lecturer: Prof. Jerry Seidler (seidler@phys.washington.edu) Office: PAB448

Ph: 206-616-8746 (but please use email as a first approach!)

Tutorial Instructor: Prof. Peter Shaffer (shaffer@phys.washington.edu)

Lab Instructor: Prof. Jens Gundlach

(jens@phys.washington.edu, or gundlach@npl.washington.edu)

Course website: faculty.washington.edu/seidler/

• The website includes links to the Tycho HW system and to the GoPost electronic bulletin board.

Office hours: T, Th 8:30-9:20

- All regular office hours will be held in the physics study center in PAA.
- Office hours are also available by appointment.

Course Texts:

- Knight: "Physics for Scientists and Engineers,"
- McDermott & Shaffer: "Tutorials in Introductory Physics"
- *Please* do the assigned reading prior to lecture, lab, or tutorial. Your education is your responsibility.

Homework:

• Homework will be collected each week. All homework will be assigned and collected through the Tycho electronic homework system. You can find links to Tycho at the course homepage.

General Issues and Lecturer's Comments:

- PHYS122 is generally considered to be the most difficult course in the PHYS121-122-123 sequence. This is both because the subject material can (initially) be a bit non-intuitive, and also because of the increase in mathematical sophistication relative to PHYS121. Student surveys indicate that 5-20 hours of work per week outside of usual class meetings is needed in order for students to reach their education goals.
- Although MATH125 is a corequisite for PHYS122, many instructors (including Prof.Seidler) believe that students who have already completed integral calculus may be at a significant advantage in PHYS122.
- Please be aware that many of the engineering and science degree programs on campus have stringent grade goals in the PHYS12x sequence associated with admissions to their majors. It is your responsibility to be aware of the requirements of your planned degree program, and to set your goals accordingly. You will receive exactly the grade that you earn absolutely *no* changes in course grades will be made to assist with admissions into a major program.

Grading Policy

Final course grades will be based on midterm exams, a final exam, lecture-assigned homework, tutorial participation and homework, and the laboratory assignments.

- Average Course Grade and Distribution: The average course grade will be about 2.9, with around 10% of the class receiving a grade of 4.0.
- Exams: There will be three closed-book midterm exams. These exams will focus on the material in the several weeks prior to the given exam this will be discussed in lecture and on the course GoPost bulletin board. After correcting for the average score on the exams, your best two exams (with respect to the average) will count 40% toward your final course grade. The midterm exams will be held during lecture hours on Fri Oct19, Fri Nov 9, and Fri Nov 30.
- Final Exam: There will be a comprehensive 2-hour final exam. The exam will be closed book. The final exam will count 25% toward your final course grade.
- Exam considerations:
 - Ordinary scientific calculators (no wireless connectivity of any kind) are permitted. You are permitted (and encouraged!) to bring one sheet of notes

 front and back, on ordinary sized paper.
 - Two sheets of notes can be used on the final exam.
 - Collaboration or outside assistance of any kind achieved by any means is forbidden, and may result in a zero score on an exam and university-level disciplinary action. The exams must be your own work.
 - There will be no make-up exams in PHYS122, however students with major outside professional, service or career commitments should contact Prof. Seidler to arrange alternative testing conditions if they are going to miss an exam. Any such accommodations must be arranged well in advance of the exam date.
 - Students who require alternative testing conditions for medical reasons should also contact Prof. Seidler as soon as possible.
 - If you miss a midterm exam, that exam will be your dropped exam.
 - You must take the exam in the section where you are enrolled. If you take an exam in a different section of this class without prior permission then you will receive a zero on that exam.
 - Students whose cellphones ring during exams will face the righteous wrath of the people sitting near them.
- Lecture Homework: Lecture homework will count 10 % toward the final course grade. Lecture homework will be assigned and collected on the Tycho homework system.
- Tutorials: The tutorial grading policy will be announced in tutorial. The physics tutorials (participation and HW) will count 10 % toward the final course grade.
- Labs: The lab grading policy will be announced in lecture and labs. The labs will count 15 % toward your final course grade.
- Lecture participation: The 'clicker' system will be used for instant response during lectures. This should be considered mainly a learning rather than a testing process. However, for encouragement, a bonus 0.1 grade point will be given to students with more than 60% correct answers for the term.