

# Syllabus

## Physics 218: Mechanics — Spring 2002

### IMPORTANT!!!! READ THIS ENTIRE DOCUMENT!!!!

**Instructor:** Dr. George R. Welch '79

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Note: **DO NOT** send email to my departmental address, or other address. You **must** use this email address for communication regarding this course.

**Office Hours**, subject to change: 10:00 – 11:00 Monday  
8:30 – 10:00 Tuesday

or by appointment. I am usually willing to work physics problems whenever you can find me, but I am usually very busy. Mornings before about 10 are the best time on most weekdays.

**Text:** *Physics, for Scientists and Engineers* (Volume 1) 3<sup>rd</sup> Edition, by Douglas C. Giancoli; *Laboratory Manual for Physics 218* 6th ed. by S. Ramirez (Pearson Publishing, rev. 2000)

**Prerequisites:** You must have a working knowledge of **algebra, plane geometry, and trigonometry.**

**Corequisites:** MATH 151 or equivalent. As the semester progresses you will be expected to have a **working knowledge** of derivatives and integrals, and be proficient in the use of vectors (cartesian and polar coordinate representation, addition, subtraction, dot and cross products).

<b>Grading:</b>	Online Math Quiz (see handout)	25 points
	Three exams in class (75, 100, 100 points)	275
	Daily quizzes	150
	Laboratory	100
	Final Exam	<u>200</u>
	<b>Total</b>	750 points.

**NOTE:** For each item in the list above, a certain number of points will be required for A, B, C, and D. Usually, this will be 90%, 80%, 70%, and 60% respectively of the number of points shown, but the percentages may be lowered. The number of total points needed for each letter grade will be the sum of the number needed for that letter grade in each item in the above list.

**Exams:** There will be three midterm exams and one final exam: Each midterm exam will be 50 minutes long, while the final exam is comprehensive and lasts for 2 hours. Each exam will generally consist of problems similar in content and difficulty to the homework or examples from the book and class. The entire solution will be graded and partial credit given if merited. Your work must show the steps toward the solution; the answer alone is not sufficient. No formula sheets will be provided, however a small amount of useful information will be provided at the end of each exam. Exams will emphasize the material of a given section, but will by necessity also include concepts from previous sections.

Only simple arithmetic will appear on the exams, so you probably will not need to bring a calculator. If you can add  $\frac{1}{2} + \frac{1}{5}$  and multiply  $5 \times 13$  you will not need a calculator. However, if it is a comfort to you to bring one, then feel free to do so.

You must bring your student ID with you to all exams for identification purposes.

Exam grades may be **curved** depending on the level of difficulty conditions of a particular exam. This **does not** mean that you are competing with each other. I am perfectly happy to give the entire class A's on an exam. (And by the same token, I am willing to give you all F's if that is merited.) In no case will a curve result in a lower letter grade than the standard 90-100% A, 80-89% B, 70-79% C, 60-69% D and <60% F.

The **Final Exam** will be comprehensive. Material past Exam 3 may be weighted more than other material covered previously.

**Daily Quizzes** will cover concepts immediately after they are presented. This will encourage your participation and attendance. These quizzes must be solved correctly. No partial credit will be given.

**Problems** will be assigned weekly, but will not usually be collected or graded. However, you need to work all of the homework problems to do well on the exams. Occasionally, some homework will be given in class and collected in the next class. These assignments will count as an in-class quiz.

**Homework problems**, and other important information will be posted on the **World Wide Web**, at <http://leona.physics.tamu.edu/Phys218.02s> . You are required to use a computer to check this site regularly. Also, email to me concerning this course must only be sent to me at the email address given above, or via the form at this web address. **Do not send email to me at other email addresses.**

All **lab and recitation** sections meet in Heldenfels Room 118. The first hour is a problem session (recitation) and the second hour is a lab. The recitation is very important — it is your chance for direct help from a young physicist. There are no labs or recitations during the first week.

Students **retaking the course** can use their lab grade from a previous semester. To do this, go to the physics department office and tell them to provide me with your previous grade.

**Absences:** If you miss any exam, with a *valid* excuse, you will be allowed to makeup that exam, otherwise the grade will be entered as 0. Policies dictating valid excuses and notification thereof are given in the *Student Rules*, located on the World Wide Web at <http://student-rules.tamu.edu/rules7.htm> . If you miss any lab with a *valid* excuse it will be your responsibility to make up that lab on the scheduled make-up day. If you *also* miss the make-up labs with a *valid* excuse, then that lab will not count toward your average, otherwise that lab grade will be entered as 0. If you miss any recitation quiz with a *valid* excuse, then that recitation work will be eliminated from your average, otherwise that quiz will be given the grade 0.

**Note:** Very few conditions qualify as an authorized excused absence, so avoid missing an exam at all costs.

The Executive Committee of the Faculty Senate recommends that instructors, particularly of lectures and labs at the freshman and sophomore levels, should include the following paragraphs in their first-day handout materials:

The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

If you have any questions regarding plagiarism, please consult the latest issue of the *Texas A&M University Student Rules*, under the section “Scholastic Dishonesty.”