

Syllabus: Physics 208: Electricity and Magnetism — **Spring 2006**
IMPORTANT!!!! READ THIS ENTIRE DOCUMENT!!!!

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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: 8:30 – 10:00 Monday and Tuesday or by appointment. Usually, you do not need an appointment, as I love to work physics problems whenever you can find me. However, I am often very busy, and mornings before about 10 are the best time on most weekdays.

Textbooks:

University Physics, 11th ed. by Young and Freedman. (You either need the complete edition or Volume 2. We will cover chapters 21 through 35.)

Laboratory Manual for Physics 218–219, 8th ed., by Ramirez, Seidel, and Hiebert (Hayden-McNeil Publishing)

Web Sites:

For our sections only: <http://leona.physics.tamu.edu/Phys208.06s/>

Old Departmental site (I don't think this is still maintained):

http://hepr5.physics.tamu.edu/phys_208.htm

Note: information on the web site for our sections supersedes information on the departmental site. You must check these sites regularly for posted information.

Homework: You also need access to MasteringPhysics for the online homeworks. This comes bundled with the text, or if you obtained the text without this feature you will have to purchase access to the site as an add-on.

<http://www.masteringphysics.com>

Pre/Co-requisites: You should have taken PHYS 218 and MATH 151 or their equivalents, and be enrolled in MATH 152 or its equivalent. You are expected to have a **working knowledge** of plane and solid geometry, trigonometry, algebra, vectors, differentiation and simple integration.

Grading:

Three exams in class (100 points each)	300 points
Final Exam	200
Homework	75
Quizzes (Daily and Recitation)	75
Laboratory	<u>100</u>
Total	750 points.

Letter Grade: 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 in the course, will be the sum of the number needed for that letter grade in each item in the above list.

Alternative: In case your final exam score is better than the average of your three exams, then the final will count 300 points toward your final grade and your exam average will count 200 points instead of the breakdown given above. This will happen automatically, and can only work in your favor.

NOTE: You must pass the laboratory and lecture (midterm exams and final) separately to pass the course. Completion of all laboratory experiments is required.

Exams: There will be three midterm exams and one final exam: Each midterm exam will last 75 minutes, 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, quizzes, and the 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. A formula sheet may be provided. If so, this will be provided before the exam. Exams will emphasize the material of a given section, but will by necessity also include concepts from previous sections.

You will need to bring a calculator to the exams. Wireless connections are not permitted.

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.

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

Homework problems will be assigned weekly. You need to work all of the homework problems to do well on the exams. Homework will be completed for grading on the web site <http://www.masteringphysics.com>. A sheet of instructions will be passed out with this syllabus, and will appear on our class web site.

Occasionally, some homework will be given in class and collected in the next class. These assignments will count as an in-class quiz (see above).

Quizzes: To encourage you to keep up, there will be daily quizzes during the lecture as well as weekly quizzes during the recitation. The quizzes in class 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.

Lab and recitation

All lab and recitation sections meet in Heldenfels Room 119. The first hour is a problem session (recitation) followed by two hours of lab. The recitation is very important — it is your chance for direct help from a young physicist. Each recitation will begin with a quiz over the previously assigned homework.

There will be no recitation or lab meetings during the first week of the semester.

Students **retaking the course** can use their lab grade from a previous semester, provided they passed the lab with a grade of 80% or higher. To do this, go to the physics department office and tell them to provide me with your previous grade. They will want to know the semester you took the class, and who was your professor. If you meet these conditions, you do not have to repeat the Lab **but you are required to attend Recitation** and take weekly quizzes.

Absences: Absences will be treated according to university regulations, as outlined in the Student Rules. <http://student-rules.tamu.edu/rule7.htm>. Policies dictating valid excuses and notification thereof are given in the Student Rules. **Note:** Very few conditions qualify as an authorized excused absence, so avoid missing an exam at all costs.

If you miss any exam, with a *valid* excuse, you will be allowed to make up that exam, otherwise the grade will be entered as 0.

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 daily quiz or 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.

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room 126 of the Koldus Building or call 845-1637.

The Aggie Honor Code states, “An Aggie does not lie, cheat, or steal or tolerate those who do.” Further information regarding the Honor Council Rules and Procedures may be found on the web at <http://www.tamu.edu/aggiehonor> .

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.”