PHYS 2212 Principles of Physics II

Spring 2017

Instructor: Dr. David Joffe

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Textbook: Serway and Jewett

Physics For Scientists and Engineers 9th Edition

with WebAssign required

Lecture: TR from 8 am - 9:15 am in Room H203

Catalog Description

This course is an introductory calculus-based course on electromagnetism, physical optics, and quantum physics. The student will be able to apply the concepts of electric field and electric potential to problems in electrostatics and with electric currents, describe the motion of charged particles in magnetic fields and induction, explain the origin of electromagnetic waves and properties of light, determine the behavior of light waves passing through single or multiple slits, and understand elementary principles of quantum physics.

Learning Objectives

- 1. Analyze and solve electrostatic problems for discrete and continuous charge distributions using pictorial, graphical, physical, or mathematical rep resentations (including calculus and vectors), and other representations as appropriate.
- 2. Analyze and solve magnetostatics and induction problems using pictorial, graphical, physical, or mathematical representations (including calculus and vectors), and other representations as appropriate.
- 3. Analyze and solve DC and AC circuit problems using pictorial, graphical, physical, or mathematical representations (including calculus and phasors), and other representations as appropriate.
- 4. Explain the nature of electromagnetic waves and predict the behavior of light waves passing through single or multiple slits.
- 5. Identify and describe the basic ideas of quantum theory, and apply its principles to simple systems

Academic Integrity Statement

Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. The Student Code of Conduct addresses the university's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to university materials, misrepresentation/falsification of university records or academic work, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Department of Student Conduct and Academic Integrity (SCAI), which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement. See also http://www.kennesaw.edu/scai/content/ksu-student-code-conduct.

Accommodations

Any student with a documented disability or medical condition needed academic accommodations of class-related activities or schedules must contact the instructor immediately. Written verification from the KSU Student Disability Services (http://www.kennesaw.edu/stu_dev/dsss/welcome.html) is required. No requirements exist that accommodations be made prior to completion of this approved University documentation. All discussions will remain confidential.

Academic Withdrawl Policy - Spring Semester 2017

Students may withdraw from one or more courses any time before the last three weeks of the semester. However, as of Fall 2004, students will be allowed a maximum of eight total withdrawals if the enter KSU as a freshman. Transfer students will be allowed one withdrawal per fifteen credit hours attempted, for a

maximum of eight. Students who choose to pursue a second degree at KSU will be allowed two additional withdrawals. Students who entered KSU before the Fall of 2004 will be allowed one withdrawal per fifteen credit hours attempted for a maximum of eight. To withdraw, the student should complete an official withdrawal form in the Office of the Registrar. Students who officially withdraw from courses on or before the last day to withdraw without academic penalty will receive a "W". Students who officially withdraw after the last day to withdraw without academic penalty (and before the last three weeks of the semester) will receive a "WF", which will be counted as an "F" in calculation of their grade point average. The only exceptions to these withdrawal regulations will be for instances involving unusual circumstances, which are fully documented. Students may appeal to the academic standing committee for consideration of unusual circumstances.

General Class Policies

- 1. You must study assigned chapters in the textbook and other assigned readings before the lecture in which they are discussed.
- 2. Regular lecture attendance is essential for success in this class. If you must miss class, it is your responsibility to get the notes you miss from another student.
- 3. Be on time for class.
- 4. Cellular telephones, pagers, and similar devices must be turned off or placed in silent mode during class. Use of cell phones should be restricted to emergencies. Cell phones or any other wireless enabled devices are prohibited during examinations.
- 5. During lecture, avoid conversation and other disruptions that distract other students from listening and learning. If you have a question or comment, direct it to the professor.
- 6. Occasionally, it may be necessary for the instructor to make corrections or changes to the syllabus. Corrections or changes to the syllabus will be announced in class.

Examination and Grading Policies

- 1. The grade in this class is determined by the total number of points earned on examinations, homework, and laboratory work as listed below in "Grade Determination."
- 2. Examinations and homework may consist of multiple-choice questions, short-answer questions, and problem solving questions. Exam questions cover lecture, assigned readings, and laboratory material. The final examination is comprehensive.
- 3. **Makeup policy:** Makeup examinations for midterms will only be given for non-emergency excused absences in the case where the student has contacted the instructor prior to the examination. Written verification for the reason the exam is missed will be required. Makeup examinations for final examinations will only be given for emergency excused absences. In particular, students are advised to consult the final exam schedule before making end-of-semester travel plans.

Grade Determination

5 Homework sets at 2% each 3 Mid-term Exams at 20% each	= 10% = 60%
Total	100%

Grade scale: A = 90 - 100 % of total points; B = 80 - 89 %; C = 70 - 79 %; D = 60 - 69 %; F = Below 60 %.

Students are solely responsible for managing their enrollment status in a class; nonattendance does not constitute a withdrawal.

Last Date to Withdraw Without Academic Penalty, Spring 2017:

March 1, 2017