

Physics 112

General College Physics II

Winter/Spring 2009

General Course Policies and Information

Instructor:

Dr. Mark Gealy

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Office Hours: Appointment or Discovery

Required Materials :

College Physics: A Strategic Approach, by Knight, Jones & Field

Student Workbook Volume 2

Lab Manual for Physics 112

Lettered Flash Cards for Responses to Classroom 'Clicker' Questions [Physics Department will provide these]

Mastering Physics Access Code Card (If you took Physics 111 last semester, your account should remain valid)

Basic Scientific calculator: Texas Instruments Model 30XA (or equivalent device approved by instructor)

Course Objectives:

-to acquire basic knowledge of the physical world

-to understand and apply basic physics principles

-to develop critical thinking and reasoning skills

-to improve mathematical problem solving ability

-to develop the ability to communicate scientific information

Course Content:

- Geometric and Physical Optics
- Electric Fields and Forces
- Simple Electric Circuits
- Magnetic Fields and Forces
- Magnetic Induction

- Electromagnetic Waves
 - Special Relativity
 - Quantum Physics
 - Atomic & Molecular Physics
 - Nuclear Physics
 - Elementary Particle
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Course Structure:

The class meets Mondays, Wednesdays and Fridays for seventy minutes. The class time will consist of a mixture of lecture, problem solving exercises, discussion and demonstrations. The class meetings will require active participation by all and this is only possible if you have prepared for class. Keeping up with reading and workbook assignments is critical because you will not receive explicit lectures covering all the basic material.

Course Grading:

The final grade will be based on the following distribution of work:

Mid-term exams (3) 16% each
Comprehensive Final Exam 20%
Laboratory 12%
Homework 15%
Workbook Assignments 5%

Exams

There will be three one-hour exams and a comprehensive final exam. All exams will be closed-book. You will be allowed to bring a single 3 x 5" note card containing any information you wish to include. You may use a basic scientific calculator, but it may not be capable of alpha-numeric data storage. You will not be allowed to share a calculator with another test-taking student. Cell phones must be turned off and stowed.

A makeup exam will never be given after the exam's scheduled time. If you know in advance that you will miss a unit exam, you must consult with the instructor ***within the first two weeks*** of the semester and other arrangements may be made pending appropriate documentation of the conflicting event. If you have an irreconcilable excused conflict that prevents you from taking a makeup prior to the regularly scheduled time, then a grade for that test will be inferred from your performance on the corresponding material on the final exam. If you miss an exam for any unexcused reason (e.g. oversleeping or inadequate preparation) you will receive a score of zero for that test. The final exam must be taken according to the college's schedule, except in cases of serious illness or emergency. No early final exams will be given so make your travel plans accordingly. The final exam will be comprehensive, covering all material for the semester.

The exam dates are:

Exam 1: Friday, February 6, 2009

Exam 2: Friday, March 13, 2009

Exam 3: Friday, April 17, 2009

Comprehensive Final Exam will be taken at the time scheduled for this class period:

Wednesday, April 29, 2009, 8:30-10:30am

Laboratory

Laboratory exercises will be conducted throughout the semester. The laboratory experiences are an indispensable part of this course. Consequently, **you cannot pass the course without passing the lab component**. Regardless of the scores you have in the rest of the course, you will automatically fail the entire course if you fail the laboratory portion of the class. Details of the laboratory policies and procedures will be discussed in your laboratory session. While you are always welcome and encouraged to work with other students on laboratory papers, the work you turn in **must be your own**. Papers that are too similar will be regarded as plagiarized. The lowest laboratory score will be dropped.

Homework

You will submit answers to homework exercises on an ongoing basis. Generally, homework problems for a chapter will be due the class period following the completion of class discussion of the relevant chapter. Work will be submitted electronically and graded automatically. Due dates and times will be programmed. Occasionally, homework assignments will include papers to be handed in to the instructor. While you are always welcome and encouraged to work with other students to solve homework problems, the papers you turn in **must be your own work**.

Papers that are too similar will be regarded as plagiarized. The lowest homework score will be dropped.

The purpose of the homework is to help you prepare for the exams by directing your readings and to provide practice problems. You are expected to work on these assignments throughout the week. Do not save them for the night before they are due. It is in your best interest to do this work in a timely fashion. It is far more effective to do a little work each day than all of it in one sitting.

Policies:

No late work will be accepted. It is your responsibility to notify the instructor in advance of any planned absence and turn in all assignments by the corresponding due dates. In the case of an extended illness or emergency, notify the instructor as soon as possible so appropriate arrangements can be made.

A grade of incomplete will only be given in case of serious illness or extended emergency and must be discussed with the instructor as soon as possible. An incomplete will not be given as a substitute for dropping or failing the course.

Every effort will be made to score exams and assignments fairly and consistently. Any request for re-grading must be made in writing within one week of the time the work was handed back. The original, unmodified, document must accompany the request.

Academic Integrity

You should remember that Concordia College is committed to the highest standards of academic integrity. Cheating in any form will not be tolerated. Cheating (stealing answers on an exam), plagiarism (representing someone else's work as your own), and "dry-labbing" (falsification of data on a lab write-up) are usually very easy to detect. In this course, there are three major components of graded written work, representing three different degrees of collaboration. **1)** You must work with other students on laboratory activities. Some written responses to lab questions will be your own and some will belong to your group. For example, it would be appropriate for all members of a lab team to present identical graphs illustrating your group's data. **2)** You are encouraged but not required to work together on the homework assignments. Because most homework activity will be handled electronically, there will rarely be times when you actually turn in papers. You are entirely responsible for your own mastery of the homework material. If you rely too heavily on others, you will probably be unable to do well on the exams. **3)** No collaboration is allowed on exams. You may ask the instructor for clarification of exam questions. If you have any questions about whether any action would be considered inappropriate, please discuss it with the professor in advance. If you are in doubt what constitutes a violation, please refer to the handbook, Academic Integrity at Concordia College.

Every violation of academic integrity is taken very seriously. Any act of academic dishonesty will result at very least in zero points for the assignment or exam in question, which will not be dropped as the lowest score when calculating a final grade. The instructor reserves the right to fail a student for the course who cheats regardless of the importance of the assignment or exam in the determination of the final grade. All violations of academic integrity will be referred to the Academic Dean for disciplinary action who may impose additional penalties, including course failure, suspension, or dismissal from the college;

As stated in the Academic Integrity handbook, "When we permit or facilitate the dishonesty of others, we too are guilty of an equally serious violation." To this end, you are expected to behave as a partner in creating and maintaining an honest academic community. Failing to report integrity violations is itself a violation of academic integrity and will be treated as such. All concerns about academic integrity will be treated confidentially.