

## P 211 SYLLABUS Spring/14 (Rev B, 1/20/14)

**COURSE:** General Physics II, P211, (Non Calculus based)  
ALL course information is posted on BlackBoard

**PREREQUISITE(s):** Math 155 or equivalent (Trig & Algebra), P210

**TEXTs/Materials:** (1) *College Physics*, Giambattista, Richardson, Richardson, 4<sup>th</sup> edition, 2012  
NOTE: There is now a digital version of this textbook available in addition to the traditional (printed) text book. See the following website for more information about purchasing the digital version instead of the printed version:  
[www.coursesmart.com](http://www.coursesmart.com)  
(2) Turning Point NXT Response Pad- see Blackboard  
(3) WebAssign Homework System (included with NEW text book) - see below

### COURSE OBJECTIVES:

General objectives are to:

- Develop an understanding of the basic concepts and principles in Physics.
- Develop critical thinking and a scientific approach to problem solving.
- Develop and use mathematical formulations of physical principles.
- Prepare the student for the MCAT exam

Specific Objectives:

This is the second of a two-semester sequence required for students who are majoring in the life sciences, the pre-medical program, the pre-physical therapy program and the engineering technology program. Topics to be covered include concepts of electrical charge, electrical and magnetic forces and fields, electrical potential, time-varying fields, resistive, capacitive, and inductive circuits, electrical and magnetic oscillations, electromagnetic waves and the properties of light, optics, special relativity, and atomic/ nuclear physics.

**CLASS MEETINGS:** Lecture: T, Th 3:30PM – 4:45 PM, Faraday 143

**Instructor:** Lyle Marschand, Faraday 221; 815-753-6469

**Office Hours:** Monday 2-3pm, Tues 10:30-11:30am, Wed 10-11am, Th 11am-12 Noon or by appointment

**Email:** [lmarschand@niu.edu](mailto:lmarschand@niu.edu)

**Web page:** <http://www.niu.edu/marschand/p211.shtml>

## TENTATIVE SCHEDULE OF TESTS:

TEST 1 Tuesday, 2/4: Chs 16,17

TEST 2 Thursday, 2/13: Ch 18

TEST 3 Thursday, 3/6: Chs 19,20

TEST 4 Tuesday, 4/8: Chs 21,22,23,24

TEST 5 Tuesday, 4/29: Chs 25,26,29,30

Post Test Thursday, 5/1

FINAL Tuesday, 5/6; 4 – 5:50PM

## GRADING:

	<u>Scale:</u>	
Tests* 35%	100 - 88	A
Final Exam* 15%	87 - 84	A-
In Class Exercises* 15%	83 - 79	B+
Homework: 7%	78 - 75	B
Post Test: 3%	74 - 72	B-
Laboratory* 25%	71 - 68	C+
	67 - 65	C
	64 - 55	D

## **\*MINIMUM REQUIREMENTS TO PASS THE COURSE: YOU MUST HAVE COMPLETED ALL THE FOLLOWING:**

1. Take 4 of the exams, the Pre & Post Tests and the Final exam
2. Achieved an average of at least 55% on the 4 Tests, the Final Exam, the in class exercises, homework and the Post Test.
3. Received a passing grade in the Lab (see Lab Information document for specifics)

## **TESTs:**

There will be 5 tests. The lowest test score will be dropped. If an exam is missed that will be the lowest score which is not counted. There will be **no** makeup tests unless you obtain written (email is fine) approval from me PRIOR to the exam. You will need to provide documentation for your absence, if you are ill I will ask you to bring in a note from Health Services or your Doctor.

The **Final** Exam is comprehensive.

## **IN CLASS EXERCISES:** (Given during Lecture sessions)

Every lecture will have exercises, most of which will be done using your TP clickers. There are **no** makeups for any missed exercises, however the **two** lowest scores will be dropped.

**RECITATION:** There will be a 1 hour recitation session during each weekly lab session. TA's will conduct study/ problem solving discussions and answer questions. Some recitation exercises will be counted as part of your lab grade.

**HOMEWORK:** Homework will be assigned to help you practice the application of the concepts provided in the text and lectures. Completing the homework is critical to improving your performance on the tests and quizzes. An internet based homework system called WebAssign will be used to assign and grade your homework. WebAssign is included in the price of a NEW textbook, but will have to be paid for if a USED textbook is used. See instructions on Blackboard for registering for WebAssign.

**WHAT TO BRING TO CLASS:** Lecture notes (printed from Blackboard), **clicker**, text book, calculator

**ACCESSIBILITY:** Northern Illinois University is committed to providing an accessible educational environment in collaboration with the Disability Resource Center (DRC). Any student requiring an academic accommodation due to a disability should let his or her faculty member know as soon as possible. Students who need academic accommodations based on the impact of a disability will be encouraged to contact the DRC if they have not done so already. The DRC is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 (V) or [drc@niu.edu](mailto:drc@niu.edu).

**COURSE POLICIES INCLUDE:**

1. Be respectful of each other (this applies to Instructors, TA's and students). Some specifics include:
  - a. No cell phone/ electronic device usage in class (except clickers, calculators). Cell/ smart phones must be turned off or silenced and placed in backpacks, etc. (not in pockets or on desks). Violators may be required to turn in their devices to the Instructor for the remainder of the class period.
  - b. Read your newspapers before or after class
  - c. No talking during class – raise your hand if have a question at any time.
  - d. If you need to leave class early, let your Instructor/ TA know
2. Laptops/ notebooks/ pads may be used for lecture materials and taking notes only, BUT students must sit in the first row of the lecture hall to use them.
3. Seat assignments will be used to facilitate in class group discussions.
4. Be aware of the policies and procedures regarding your rights as well as responsibilities that are published in the NIU Student Code of Conduct. It is available on line at [http://www.stuaff.niu.edu/judicial/24430jo\(body\).pdf](http://www.stuaff.niu.edu/judicial/24430jo(body).pdf) .
5. The instructor and the university reserve the right to modify, amend, or change the course syllabus (course requirements, grading policy, etc.) as the curriculum and/or program require.
6. If you feel there was an error in the grading of a Test, submit a written request, indicating the specifics within **7 days (no exceptions)** to the Instructor. Your test will be re-graded and returned to you. NOTE: No partial credit problems will be re-graded if they contain **erasures** (draw an "X" thru work, rather than erasing it).