Physics 273 Honors (Spring 2017)

Fundamentals of Physics II

Syllabus available on BlackBoard

http://webcourses.niu.edu/

under Course information
Meeting times as needed. Morning until about 1:45 PM. Please see me for other meetings.
On most meeting days, I will be available most of the day.

Office hours (FW 210): Subject to change:

- From 2:00 to 3:15 PM
- Tuesdays and Thursdays

We will meet twice a week in FH 144.
Penalties: Each missed deadline will result in a automatic 30% deduction.

With your written permission, I may upload your videos to a special YouTube Channel.

- By the week of March 27, you must appear performing all the experiment in the video.
- The experiment has to be performed, taped on video and submitted no later than the week of March 6.

If you miss deadlines, components must be acquired and demonstrated by the February 9.

Project ideas must be presented in writing and approved by me no later than Thursday.

Project Deadlines:

This project will count for 200 points or as much as two regular lab worth.

Lab Project and Video

Project so only serious experiments may be considered.

Internet and YouTube are not a High school search the content of this course, of your own design and execution (search)

You will be joining the regular PHYS 273 lab sections and will do the same
(Tues. May 9, 2-3:50 p.m.)

Final exam score of less than 50% will result in failing the class if your Test:

Final Exam: 25%

Lab: 20%

Final exam score of less than 60% regardless of your overall grade.

A minimum lab average of 60% is required. You will fail if you don't satisfy this score.

Make sure you check your Report(s) in a timely manner (Lab Schedule and Lab Rules). If you fail to perform the lab project as described earlier, you will be required to fully perform the lab project as described earlier.

In addition to the regularly scheduled labs, you are required to perform the lab projects as described here and throughout the syllabus. If you fail to perform the lab project as described here and throughout the syllabus, you will fail the course.

Tests are cumulative. Dates will be announced in class and/or through Blackboard. No make up tests for any reason. Tests cannot be taken at times other than the class test time (DRC exceptions).

Tests (2 to 3): 45%

Grades could include pop quizzes, online quizzes, spot checks for attendance, etc.

Quiz: 10%

Homework: 0%

Grade determined by:
Zero Tolerance Policy.

Cheating and plagiarism are serious offenses. You will fail the test if any device other than a calculator is

exam other than a calculator.

In the front rows. No electronics allowed on the tests and final

using the electronic version of the book but the user must sit

lectures, tests, etc.), small laptops maybe acceptable if for

MP3 players, iPods, etc.) allowed during class time (i.e., during

No newspapers or electronic devices of any kind (Cell phone,
Part IV - AC Circuits
Part III - Electromagnetism
Part II - Magnetism
Part I - Electricity

Chapters 21 through 31
Course content
Displacement current and the Ampere-Maxwell law

Ampère's law

Magnetic poles and current loops

Gauss's law for the magnetic field

Forces of parallel currents on each other and the definition of the Ampere

Biot-Savart law

Torques

Work done by magnetic forces

Magnetic forces on currents

Magnetic field

Magnetic forces and the Magnetic Field

Part II - Magnetism
Way to medical instruments.

art applications from engineering devices all the how are they applied in many current state-of-the-art applications.

Magnetism describes many natural phenomena and the students will learn how electromagnetism.

relationship between electromagnetism and magnetism.

develop critical thinking skills, and understand the calculus to solve critical multistep problems.

Students are expected to learn how to apply

Learning Objectives
helpful in enhancing your academic success in this course. I look forward to talking with you to learn how I may be

(\( \text{or dr@midni.edu.} \))

Health Services Building, and can be reached at 815-753-1303. The DRC is located on the 4th floor of the

disability will be encouraged to contact the DRC if they have not

need academic accommodations based on the impact of a

student. Students who have faculty member know as soon as possible. Students who

academic accommodations due to a disability should let his or

the Disability Resource Center (DRC). Any student requiring an

accessible educational environment in collaboration with

Northern Illinois University is committed to providing an
consistent with the policies set forth in the course syllabus.

on the instructor, who remains solely responsible for assigning a course grade, recommendations by the hearing board regarding the course grade are non-binding.

either a finding of responsibility or an admission of responsibility by the student, any action the ruling of the Judicial Hearing Board shall be binding. In cases where there is no action with regards to finding the student either responsible or not responsible for his or her greater than an F in a course can be levied only through the University Judicial System.

Student Conduct shall receive a copy of the Academic Misconduct Incident Report. Additional sanctions may be imposed if the faculty member feels a sanction greater than an F in the course is appropriate (such as repeated offenses or flagrant violations). The faculty member shall refer the matter to the Office of Community Standards and Student Conduct in all matters where the charge of academic misconduct is disputed by the student or if the faculty member feels a sanction greater than an F in the course is.

Student Conduct shall receive a copy of the Academic Misconduct Incident Report whenever such action is taken, and the Office of Community Standards and Student Conduct in all matters where the charge of academic misconduct is disputed by the student or if the faculty member feels a sanction greater than an F in the course is.

The faculty member may elect to resolve the matter at that level by levying a sanction no greater than an F in a course which the faculty member is teaching. The student shall be given the opportunity to resolve the matter in meetings with the faculty member and the department chair. If the facts of the incident are not disputed by the student, the faculty member has original jurisdiction over any instances of academic misconduct.