

PHYS 253 – Fundamentals of Physics I : Mechanics, Spring 2017

First semester of calculus-based general physics course covering physical laws governing motion, force, energy rotation and vibration. Includes one laboratory session per week.

Instructor: Dr. Vishnu Zutshi (vzutshi@niu.edu)

Lectures: M, W and F (11:00 am – 11:50 am), La Tourette Hall, Room: FW200

Office Hours: M, F (12:30 pm – 1:30 pm) or by appointment, Room: FR221

Required Material:

Textbook: Physics for Scientists and Engineers by Giancoli, 4th Ed. (Pearson)

Online Homework System: Mastering Physics (Pearson)

Intended learning outcomes:

Comfort with concepts and techniques of basic classical mechanics.

Grading:

- Comprised of Lecture (75%) and Lab (25%) portions. Note that you must pass the Labs (cumulative score > 60%) to pass the course.
- Additionally a minimum lecture attendance record of 80% is required to pass the course. This is tabulated using your written response to in-class problems.
- Homework (given once a week, 40% of Lecture-portion grade)
- Exams (4 given, best three used for 60% of Lecture-portion grade)

Class participation:

Full attendance at all class meetings (Labs and Lectures) is expected. Tardiness or leaving early must be avoided in order for the class to be productive for all. Students are strongly encouraged to participate in class discussion and ask questions during class.

In-class electronic communications:

I ask that you do not take phone calls, text, email, update your status, or tweet during lectures.

Reading assignments:

To familiarize yourself with the material covered in class, please read your textbook in advance.

Homework:

There will be weekly online homework assignments made available through Mastering Physics. Late homework will not be accepted. Students may discuss homework concepts with each other. However, each student must submit his or her

own work. Note that in the exams you are on your own, and the assignments should get you prepared for the exams.

Additional Resources:

Significant additional resources of class are available (e.g. physics help room FR251). It is your responsibility to seek out these resources if you are having difficulty in the course.

Academic Integrity:

Good academic work must be based on honesty. The attempt of any student to present as his or her own work that which he or she has not produced is regarded by the faculty and administration as a serious offense. Students are considered to have cheated if they copy the work of another during an examination or turn in a paper or an assignment written, in whole or in part, by someone else. Students are responsible for plagiarism, intentional or not, if they copy material from books, magazines, or other sources without identifying and acknowledging those sources or if they paraphrase ideas from such sources without acknowledging them. Students responsible for, or assisting others in, either cheating or plagiarism on an assignment, quiz, or examination may receive a grade of F for the course involved and may be suspended or dismissed from the university. (NIU UC)

Incomplete grades:

Incompletes will only be given under extraordinary circumstances such as extended illness or call-up to active military duty.

Receiving assistance:

Students are urged to contact me should they have questions concerning course materials and procedures. If you have a disability or any other special circumstance that may have some impact on your course work and for which you may require accommodations, please contact me early in the semester so that arrangements can be made with the Disability Resource Center (DRC)

<http://niu.edu/disability/>