PHY 2170/2175 General Physics Winter 2012

Instructor: Assoc. Professor Joern Putschke,
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Office hours: Tue 5:00 – 5:45pm, Thu 4:15-5:45pm

Lecture time and location: Tue, Thu 6:00pm – 8:15 (7:20) pm, 2009 Science Hall

Textbook: "***University Physics***" by Bauer and Westfall, 1st edition, Available at the Campus Bookstore. Buy the edition that includes WebAssign.

Course website: Wayne State Blackboard website; Please check it frequently for updated info. Lectures will be posted after each class.

Pre-requisites and Co-requisites: Pre-requisite MAT 2010 is **required**. MAT 2020 is the co-requisite. For PHY 2171 (Lab) taken concurrently with PHY 2170, it is a separate, one-credit laboratory course, with its own instructors, grades, procedures, and Lab Manual; *I do not teach this lab course*.

Quiz Sections: Meet once per week, to discuss homework assignments, ask questions regarding lectures, textbook, and course materials, and learn problem-solving skills. The attendance of quiz sections is *crucial* for understanding course contents and maintaining a good grade. Quiz Sections are taught by Abd Elhamid and Wanniarachchi thereby giving you the opportunity to learn the material from a different person or point of view. There will be weekly quizzes consisting of one simple question. Questions will be given at the very end of each Quiz session. You will have 10-15 minutes to answer the question. The question will be assigned by me but graded by the quiz instructors. I will equalize the grades from different sections to account for instructor grading styles (15%).

Homework: 1) Practice homework problems are assigned each week. Although they will not be graded, it is strongly recommended that you work out all the problems by yourself before bringing them to the quiz sections for discussion. You are highly encouraged to work through other problems at the end of each chapter. Also, it is extremely important to handle your homework and understand the course materials timely. Due to the fast pace of the course, it is almost impossible to recover once falling behind.

2) Online homework (**15%**): Posted on WebAssign online website (http://www.webassign.net) and graded automatically; Problems will be assigned each week, and will be due typically 1-2 weeks after being posted; Late submission of solutions will NOT be accepted. WebAssign access card valid for one or two semesters may be included in the textbook package; or you could purchase the

access online. Please consult the Student Guide on WebAssign website for more information.

Note that it is impossible to obtain a good grade in this course without making conscientious efforts on all the homework and attending course lectures and quiz sections.

WebAssign: The WebAssign website is http://www.webassign.net. You will need to self-register (i.e. you register into WebAssign yourself). To do this, click the "I have a Class Key" in the Account Log In box (Top right). You will then be prompted to supply a course/class key. Enter the key: wayne 0272 9037. And answer the questions. As a username, please use your Wayne State username ID.

Reading Assignments: The tentative schedule of lectures and reading assignments for this course is posted in Blackboard and at the end of each lecture. It is very important to complete the assigned reading and review/understand the lectured materials of the last class ***before*** the next lecture.

Exams: There will be three midterm/hourly exams (in class), and one final exam (comprehensive, i.e. cumulative), **all being closed-book exams**. There will be **NO make-up hourly exams** for any reason. Note that the final exam schedule is determined by the university, and CANNOT be changed.

You MUST bring your Wayne State ID to the exam and present it to a proctor when handing in the exam. No electronic devices (other than a calculator) are allowed. Any conduct of academic dishonesty will not be tolerated. Cheating on an exam will award you an F on the exam.

Exams will consists of 3 parts

- Conceptual questions (True/False and Multiple Choice)
- Short Numerical Questions (No Partial Credit)
- Long Numerical Questions (Partial Credit if work shown is reasonable and valid).

Grading:

Midterm exams:	16.6% each, totally 50%
Final exam:	20%
Quiz section:	15%
Online homework:	15%

Grading scale:

A	90 – 100%	B-	70 – 74%	D+	50 – 54%
A-	85 – 89%	C+	65 – 69%	D	45 – 49%
B+	80 – 84%	C	60 – 64%	D-	40 – 44%
B	75 – 79%	C-	55 – 59%	F	0 – 39%

Additional Resources and Help:

Physics Resource Center, located in Room 172 of Physics Research Building. The scheduled time will be announced later, or can be found from the physics department main office. This is a Help Center for students taking undergraduate physics; from there you can get assistance with your homework, lab work, and other issues related to this course.

Student Disability Services: If you have a documented disability that requires accommodations, you will need to register with Student Disability Services (SDS) for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TDD only). Once you have your accommodations in place, I will be glad to meet with you privately during my office hours to discuss your special needs. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University. Please be aware that a delay in getting SDS accommodation letters for the current semester may hinder the availability or facilitation of those accommodations in a timely manner. Therefore, it is in your best interest to get your accommodation letters as early in the semester as possible.

Week	Date	Chap #	Lecture Topics
1	10-Jan	1-2	**Overview, Math Primer, Motion in 1 Dimension**
2	17-Jan	3-4	**Motion in 2 and 3 Dimensions, Force**
3	21-Jan	5-6	**Energy and Power, Energy Conservation**
4	28-Jan	7-8	**Momentum Conservation System of extended objects**
5	7-Feb		**Review/Overflow**
5	9-Feb		**EXAM #1**
6	14-Feb	9-10	**Circular Motion, Rotation**
7	21-Feb	11-12	**Static Equilibrium, Gravitation**
8	28-Feb	13-14	**Solids and Fluids Oscillations**
9	6-March		**Review/Overflow**
9	9-March		**EXAM #2**
10	13-March		**Spring Break**
11	20-March	15-16	**Waves, Sound**
12	27-March	17-18	**Temperatures, First Law of Thermodynamics**
13	3-April	19-20	**Ideal Gases, Second Law of Thermodynamics**
14	10-April		**Review/Overflow**
14	12-April		**EXAM3**
15	17-April		**Review/Overflow**
16	26-April		**FINAL EXAM**