

University of Toledo
Fall 2010

Physics 2140, Sections 10–12 Physics for Science and Engineering Majors II

Lectures: Mondays, Wednesdays, Fridays at 11am in McMaster Hall (MH) room 1005

Quizzes/Exams: Thursdays at 11am in Driscoll Center (DC) room 1019 (*across Bancroft from MH*)

Recitations: Tuesdays at 9am, 11am, or 12pm in MH 1003 (consult your schedule)

Labs: Various days and times. **You must be registered for a lab!**



Instructor: **Dr. Scott A. Hill**

Visiting Assistant Professor

Ph.D. in physics, University of Chicago, 2002

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Office: McMaster Hall 4008 **Phone:** (567) 343-2284 (567-DIDACTIC) *or* x2319

Daughter: Miriam, 3 years old

Class Website: <http://phys2140.nfshost.com>

Office Hours in my office (MH4008):

Monday	Tuesday	Wednesday	Thursday	Friday	Other times
9:30-10:30am	10:00-11:00am	7:30-8:30pm	9:30-10:30am	9:30-10:30am	by appointment

“Virtual” office hours most evenings by Instant Messenger (doogadgit); feel free to send a message, though I may ask to get back to you later.

Materials and Resources

Text: *Fundamentals of Physics* by Halliday, Resnick, and Walker, 8th edition (ISBN 0471758019 or 0470044721). If you do not already own this book from a previous class, you might consider buying just the second half of the book from an online bookseller (ISBN 0470044748). Earlier or later editions will also be fine; I do *not* follow the book closely and will not assign homework from it. You do *not* need the online supplement to the textbook.

Calculator: A scientific calculator is required. It does not need to be a graphing calculator, but needs to have the trigonometric functions and scientific notation; you can get one for \$10–\$20. Bring it to all classes and exams, unless otherwise notified. **You may not share calculators** during exams, and you may not use a cell phone, laptop, or similar device as a calculator during exams either.

Flash Cards: Please purchase a set of flash cards from the bookstore, and bring them to every class. The cost is minimal (\$3–\$4), but see me if it is a hardship, or if you misplace your original set.

Website: This class has a website at <http://phys2140.nfshost.com>, which is updated frequently. There you can find a copy of the syllabus, as well as homework assignments with solutions, quiz and exam solutions (only after they’ve been given, of course!), class news, and access to your grades. Most of these materials will **not** be handed out in class, so please visit the website on a regular basis, or subscribe to the website’s RSS feed or mailing list.

Help Center: Located outside the physics office (MH2017); physics graduate students are available to answer questions, typically during “business hours”. The schedule will be posted at the center when available.

Grading and Assignments

Quizzes (15% of grade): On most Thursdays, the class will meet in room DC1019 to take a 10-minute quiz on the preceding week's material. Each quiz consists of six multiple-choice questions; partial credit is not available, but the two lowest quiz grades (including missed quizzes) will be dropped. Quizzes are closed-book and closed-notes, and as they are largely conceptual, calculators are not permitted.

Exams (3×20% each): There are three midterm exams during the usual Thursday quiz period: tentative dates are September 23rd, October 21st, and November 18th. These exams are non-cumulative, and include both conceptual questions and numerical problems. Exams are closed-book and closed-notes, but you are allowed to bring one sheet of 8½"×11" or A4 paper on which is written any equations or any other information you wish to have. (Magnifying devices are not permitted!) Partial credit is available on exams.

Final (20%): A two-hour comprehensive final exam will be held during finals week; you may use *two* pages of notes, front and back, and a calculator; as with the midterms, no other resources are permitted. The exact date and time of the exam will be announced later in the semester, but will either be Thursday, December 16th at 10:15am in DC1019, *or* Friday, December 17th, at 10:15am in MH1005.

NOTE: Bring your student ID with you to every quiz and exam; it may be used to confirm your identity and prevent "ringers". No electronic devices outside a basic calculator may be used at any point during the exam; phones must be turned **off**.

Lab (5% of grade): You **must be registered** for a lab section (PHYS 2140, sections 021 through 039). Performance in lab will constitute 5% of your grade; however, anyone who fails the lab (difficult but not impossible to do) will fail *this* course automatically. More information will be available during your first lab meeting during the second week of classes. Note that Professor Hill is not involved with the labs and so generally won't be able to answer procedural questions about it: I will help point you in the right direction, but in most cases, questions about the lab can be best answered by your lab proctor or in the physics office (MH2017). *If you think you don't have to register for the lab for one reason or another, confirm it with me: if you are wrong, things will get ugly.*

Homework (0%): Homework will be assigned weekly on Tuesdays on the class website; solutions will be posted online the following Monday evening and discussed during recitation on Tuesday. Homework will *not* be collected or graded, but should not be ignored, as it is an essential part of your physics education. For best results, try to complete as much of the homework as possible in time for recitation. If you think you can get by by just reading the homework solutions... well, maybe you can, but why risk it?

Policies

Academic Honesty: I expect you to behave honorably while in this class, and to refrain from cheating of any sort. Any student who is caught cheating during exams or quizzes will be referred to the appropriate authorities for sanction; *minimum* punishment is a zero for the affected work.

Accessibility: Any student with a disability who wishes to receive academic and/or classroom accommodations *must* provide documentation from a diagnosing professional to the Office of Accessibility, located in Room 1820 of Rocket Hall, (419) 530-4981. The documentation provided must reflect a disability that currently and substantially limits academic functioning. The Office of Accessibility will determine what accommodations are appropriate and reasonable based on the documentation provided. For more information, visit <http://www.utoledo.edu/utlc/accessibility>. Accommodation on any given exam cannot be given without prior notification to the instructor.

Class Attendance: Attendance is not required, because you are an adult and I can't make you do anything. You are responsible for everything discussed in class, whether you attend or not. It is recommended that you make arrangements with a fellow student, so that either of you can contact the other for notes in case of absence. Announcements made in class will generally be posted on the class website, but if I forget to do so, you are *still* required to know what I said in class. Note that while I am happy to talk with you about what you missed in general terms, I cannot give entire "makeup" lectures over the phone or during office hours.

Distractions: Mobile phones and other noisemakers must be silenced during lecture; violators will be mocked. If you must take or make a phone call, please retire to the hallway to do so. You may not use a cell phone for any reason during exams (including as a calculator). If you must eat, play games, snooze, or engage in any other behavior which is mildly distracting to your fellow students or the instructor, please sit in the back of the classroom. The instructor will ask you to stop or leave if you are too distracting. If **you** find another student's behavior to be distracting, and don't want to confront her or him yourself, please let the instructor know.

Grades: Grades can be accessed through the class website, using the ID number given to you during the first recitation; if you lose your ID number, talk to the instructor.

Missed Quiz/Exam Policy: The University permits students to make up work for the following reasons only:

1. personal emergencies (personal illness, illness of a dependent, or death in the family);
2. religious observances that prevent the student from attending class;
3. University-sponsored activities, approved by the appropriate University authority;
4. government-required activities (such as jury duty or military service)

The following conditions must also hold:

- the student contacts the instructor *before the class begins*, unless this was demonstrably impossible, using one of the following mechanisms: written note, email, telephone, or IM. When feasible, it is better to use two communication mechanisms, as the student is responsible for failed communications (e.g. wrong number, lost email, etc). Note that telling me in person about an absence is *not* acceptable, as I am responsible for over a hundred students and can't easily keep track of you all.
- the instructor is provided with acceptable documentation (e.g., a note from a doctor in the case of illness, a note from a coach in case of an athletic event, a program from a funeral or religious event, etc).

Quizzes missed due to excused absences will simply be excluded from the student's quiz average; nor will they count as one of the student's "dropped" quiz grades. Missed exams may be made up with an oral exam, scheduled at the convenience of the instructor and student; if only one exam is missed, the student may choose to forgo the oral exam and have the missed exam be the dropped exam.

Tardiness: If you are *late* for a quiz or an exam, come anyway; accommodations may be made for you by the instructor, provided you arrive before the end of the exam period (or in the case of quizzes, before the instructor leaves for lunch).

Online notes: I will be posting audio recordings of lectures online, as well as copies of the virtual whiteboard I use in class. This is for the convenience of students who can't make it to lecture; they are not meant to be a substitute for regular lecture attendance. In the event of a technical difficulty which prevents the notes from being posted, you are still responsible for the material covered in that lecture, so have a backup plan.

Withdrawal: The deadline to *drop* this course is September 7th; it will not show up on your transcript in that case. You may *withdraw* from this course at any time before October 29th; the class will be listed on your transcript with a grade of W. Both are done by the student through the Registrar; the instructor cannot drop or withdraw students (although he would appreciate being notified of the withdrawal). Note that the instructor is *required* to give a letter grade to all students registered on October 30th.