

University of Maryland - Department of Physics

Spring 2014 Prof. Carter Hall Physics 410

Title: *PHYS 410 Classical Mechanics*. Theoretical foundations of mechanics with extensive application of the methods. Various mathematical tools of theoretical physics.

Prerequisites: *PHYS374 Intermediate Theoretical Methods*.

Instructor: Prof. Carter Hall, Office: Physical Sciences Complex 2214, Phone: x5-6103, email: crhall@umd.edu.

TA: Hao Wu, Office: IPST Building Room 2121, x5-5969, email: hao.harry.wu@gmail.com

Office hours:

Instructor office hours: My office hours will be Mondays and Tuesdays, 9:00 am to 10:00 am, and by appointment. You are also welcome to come to my office without an appointment, however I may not be available.

TA office hours: 4 – 5 pm on Tuesdays in IPST Building Room 2121.

Schedule: 3 meetings weekly:

M, W: 11-11:50 am (PHYS 0405) and
F: 10-11:50 am (PHYS 0405) (*2nd hour is recitation*)

Text: *Classical Mechanics*, John R. Taylor, University Science Books, (2005) ISBN: 9781891389221

Website: <http://www.physics.umd.edu/courses/Phys410/Hall-Spring-2014/>

Grades: Will be maintained on <https://www.elms.umd.edu/>

Homework: The homework assignment will be posted on the course website each Thursday. It is the student's responsibility to check the website for the assignment each week. Homework will be collected in class each Wednesday, except for exam weeks, for a total of 11 homework assignments. Late homework will not be accepted. No make-up homework will be accepted, but the lowest two homework grades will be dropped when your final grade is calculated. Homework will not be accepted electronically. If you use a computer but you have trouble printing your results, you may sketch your results by hand.

Class hours: *Lectures* will be held on Monday and Wednesday from 11 – 11:50 am and Friday from 10 – 10:50 am. *Recitation* will be held on Friday from 11 – 11:50 am. The recitation will be a combination of hints on the upcoming homework assignment and review of the previous assignment.

Exams: There will be two take-home mid-term exams and a final exam. The mid-term exams will be posted on the course website after class on Monday March 3rd and Monday April 14th and will be due in class two days later. The final exam will be held on May 17th from 8 to 10 am on PHYS 0405.

Credit: Midterm exams 1 and 2 are worth 20% each, homework is worth 30%, and the final exam is worth 30%.

Grading Scale: A ten-point grading scale will be used to assign final letter grades, with the “-“ and “+” grades reserved for the lowest three and highest three points in each bracket. For example, 87% to 89% will be a B+, 83% to 87% will be a B, and 80% to 83% will be a B-.