

University of Maryland - Department of Physics

Spring 2015      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. (4 credits)

**Prerequisites:** *PHYS374 Intermediate Theoretical Methods*.

**Instructor:** Prof. Carter Hall, Office: Physical Sciences Complex 2114, Phone: x5-6103, email: crhall@umd.edu.

**TA:** Ruizhi Pan, Office: 0220 John S. Toll Physics Building, x5-5969, email: panruizhi@gmail.com

**Office hours:** My office hours will be Tuesdays and Wednesdays, 9:30 am to 10:30 am, and also by appointment. You are also welcome to come to my office without an appointment, however I may not be available.

**Schedule:** 3 meetings weekly:  
T, Th: 11 am - 12:15 pm (PHYS 0405) and  
F: 10 am - 10:50 am (PHYS 0405)

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

**Website:** <http://www.physics.umd.edu/courses/Phys410/Hall-Spring-2015/>

**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 Thursday, except for exam weeks, for a total of 10 homework assignments. Policies:

- Late homework will not be accepted.
- 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.

**Exams:** There will be three in-class mid-term exams and a final exam. The mid-term exams will be held on Thursday February 19th, Thursday March 26th, and Thursday April 23<sup>rd</sup>. The final exam will be held on Thursday May 14th from 8 to 10 am on PHYS 0405.

**Credit:** Midterm exams 1, 2, and 3 are worth 50% combined, homework is worth 20%, 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-.