Physics A300: Classical Mechanics

Syllabus and Course Information – Fall 2002

Midterm Details Revision – 2002 October 21

Course Information

Lectures:
MWF 11:30am-12:20pm, 156 Monroe, beginning August 26 and ending December 4

Holidays (no lecture):
Sept. 2: Labor Day; Oct. 14: Loyola Day; Nov. 1: All Saints; Nov. 27 & 29: Thanksgiving

Textbook:
Classical Dynamics of Particles and Systems, by Jerry B. Marion & Stephen T. Thornton

Instructor:
Dr. John T. Whelan; 464 Monroe, 865-3641; `jtwhelan@loyno.edu`
Office Hours: MW 3:00-4:00pm, W 10:00-11:00am, or by appointment

Prerequisites:
PHYS A110-A111 (Basic Physics I-II); MATH A259 (Calculus III)

Scope of Course:
PHYS A300 and A301 will between them cover all of Marion and Thornton. PHYS A300 is expected to cover at least the first eight chapters, including Newtonian mechanics, oscillations, chaos, variational principles including Lagrangian and Hamiltonian formulations of mechanics, and gravity and other central forces.

Exams:
One midterm exam, two parts, given in class October 28 and October 30.
Final exam will be held Wednesday, December 11, 11:30am-1:30pm.

Homework:
Weekly problem sets, with due dates posted on the problem sets. Homework will not be accepted after solution sets have been distributed.

Course Website: `http://www.loyno.edu/~jtwhelan/A300/`

Course Listserv: `physa300002@loyno.edu`
Please subscribe ASAP by sending email to `majordomo@loyno.edu` with `subscribe physa300002` in the *body* of the message.

Course Policies

Attendance:
There is no attendance grade for the course, and no penalty for missing class. However, most students will find themselves at a disadvantage on the homeworks and exams if they neglect to take advantage of the full range of tools (including both lectures and reading) to gain understanding of the material.

Class Disruptions:
Please try to avoid disrupting the class by arriving late and/or leaving early. Please switch off all cell phones and beepers if possible. In case of an urgent need to be reachable during 50 minutes of lecture (on-call EMT, critically ill loved one, etc.), please use silent/vibrate mode.

Collaboration:
Collective brainstorming is a time-honored tool of physicists attacking a problem, be they freshmen or tenured professors. That said, working through the homework problems is an important aid to gaining mastery of the material, and a student who simply transcribes the solution of another student or of the group will likely have trouble come exam time. You should therefore limit the output of group efforts to notes or sketches of a solution, and each write out the solution alone in your own words. (A more explicit policy may be established if multiple students hand in nearly identical homework assignments.)

Working together on exams or copying off of someone else's test is of course cheating and will not be tolerated.

Grades:
Grades will be based on a linear combination of the overall homework grade, midterm exam grade, and final exam grade, each graded on the scale below. The weights for the final grade will be 35% homework, 25% midterm exam, and 40% final exam. Due to the weather-induced postponement of the midterm exam, midterm grades will be based on homework graded to date.

Grading Scale:

3.75–∞	A
3.25–3.75	B+
2.75–3.25	B
2.25–2.75	C+
1.75–2.25	C
1.25–1.75	D+
0.75–1.25	D
$-\infty$–0.75	F

Special Arrangements for Students with Disabilities:
Students with disabilities who wish to receive accomodations in this class should contact Disability Services at 865-2990 as soon as possible so that warranted accomodations can be implemented in a timely fashion. Disability Services are located in the Academic Enrichment Center, Monroe Hall 405.