

# **PHYS 606: Classical Mechanics**

## **MWF 10:00 – 10:50 AM, PAHB 123**

**Instructor:** Jason Kestner  
**Office:** Physics 217  
**Office Hours:** F 11:00AM–12:00PM, or anytime my door is open  
**Email:** jkestner@umbc.edu  
**Textbook:** Classical Mechanics, Goldstein, 3rd ed.  
**Other resources:** David Tong's online lecture notes

### **Course Description**

The material covered in this course provides many of the fundamental concepts and intuitions on which are built the more modern topics in physics, for instance quantum mechanics, solid state physics, and field theory. I plan for us to cover chapters 1-6 and 8-9 of Goldstein. As is standard for a graduate level course, you are expected to read the textbook and learn on your own. My role is to assist you in the process, and I intend to use the class time to take questions, reinforce key concepts, and work through examples together.

### **Assignments**

Homework will be assigned regularly. Some of the textbook problems have solutions posted on the internet. Some of those solutions are even correct. You are permitted to consult those solutions responsibly. Copied or paraphrased work is unacceptable. It is fine to use somebody else's idea in your solution, but you must include a citation. The work you turn in must be self-contained, logical, and neat. You may use Mathematica or other software unless instructed otherwise. If you do so, you must attach a printout to your homework.

### **Exams**

There will be two midterm exams and one final exam. The final exam will be cumulative.

## Overall Grades

Your course grade will be determined by the following components:

Homework	20%
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	30%

This course will not be graded on a curve. Total scores translate to grades in the following way:

Score	Grade
90–100	A
88–90	A-
85–88	B+
81–85	B
78–81	B-
75–78	C+
71–75	C
68–71	C-
65–68	D
0–65	F

## Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

## Title IX, Equity, and Inclusion

Federal law mandates notice of the policies available at <https://ecr.umbc.edu/sample-title-ix-responsible-employee-syllabus-language/>.