

# CLA PHY 340.001 Syllabus

## 1 Class Info

Course Name: Intro Physics I Class meeting (SEB 140): MWF 9:00-9:50 AM

Text: *Classical Mechanics*, Taylor

Instructor: Will Sams

Office Hours (SEB 208): TUE/THU 1:00-2:00 PM, or by appointment (which you are *very* welcome to make by email or in person

Email: sams\_wr@mercer.edu

Phone: 478-301-2747 (email preferred)

Final Exam (SEB 140): MON, May 1, 9:00 AM-12:00 PM

## 2 Grading Scales

Homework	40%
First Test	12.5%
Second Test	12.5%
Oral Final Exam	10%
Written Final Exam	25%

90-100	A
87-89	B+
80-86	B
77-79	C+
70-76	C
60-69	D
59 or below	F

For rounding of grades, all final grades with decimal values of 0.5 or above will be rounded up to the next whole number, and values below 0.5 will be rounded down. Note that this only applies to the final grade for letter-grade determination; individual assignment grades may have decimals.

Any student who receives failing grades on one or more assignments during the semester is strongly urged to arrange a meeting with me to discuss the assignments in question.

## 3 Introduction

Welcome to PHY 340, a course which builds upon the foundation laid down in PHY 161 and expands it to a number of more difficult and advanced situations. Analytical mechanics is a catch-all term for a number of methods formulated to analyze the motion of objects that exist as alternatives to Newtonian mechanics. These formulations are not “new” physics as compared to Newtonian mechanics; they’re simply different ways of translating the same physics into different approaches that may sometimes be more useful, depending on the situation. This course is concerned primarily with exploring how objects move and why they behave the way they do when they move, in more complicated situations than what was explored in

General Physics I. This may include motion in rotating reference frames, motion in the presence of air resistance, coupled harmonic motion, orbital precession, and relativistic motion.

## **4 Tests**

There will be two tests during the semester and a final exam. All tests will be administered during regular class time. The final exam will have a written and oral component. The written component will be administered in the classroom on the date and time listed at the top of the syllabus. The oral component will be held near the end of the semester, with the exact schedule to be worked out later.

## **5 Homework**

Homework will be assigned most class days to be due the next class meeting. Working through the homework is one of the cornerstones of this type of course; you can only gain so much listening to the instructor or taking notes. A large part of learning these techniques involves first-hand practice.

Most homework questions will be presented in class on the due date by a randomly-selected member of the class. Successfully demonstrating and explaining these problems will be part of the homework grade. All students will have their homework graded regardless of who is selected to present, and the presentation choices are randomized, so it's important to come to each class prepared and with homework completed.

## **6 Academic Misconduct**

The University's academic misconduct policy and Honor Code will be followed. All suspected violations of the University Honor Code will be forwarded to the Honor Council.

## **7 Cell Phones**

Out of courtesy for all those participating in the learning experience, all cell phones and pagers must be turned off before entering any classroom, lab, or formal academic or performance event.

## **8 Accommodation for Students with Disabilities**

In compliance with Section 504 of the Rehabilitation Act of 1973 (504) and the Americans with Disabilities Act Amendments Act of 2009 (ADAAA), "otherwise qualified" students with disabilities are protected from discrimination and may be entitled to "reasonable accommodations" intended to ensure equal access to all courses, programs and services without a change of curriculum. Examples of accommodations include: testing accommodations, providing alternative format textbooks and tests, notetaking support, and modifications of policies and procedures. Equal Access may require moving a class or event to a physically accessible room, making websites accessible to screen readers, providing sign language interpreters and captioning videos. All students requesting to be recognized as a student with a disability or requiring accommodations must first self-identify by registering with the designated ACCESS Coordinator for their campus or program by providing appropriate medical documentation that supports the need for the requested accommodations.

Students requiring accommodations or modifications for a disability should inform the instructor at the close of the first class meeting or as soon as possible. The instructor will refer you to the ACCESS and Accommodation Office to document your disability, determine eligibility for accommodations under the ADA/Section 504 and to request a Faculty Accommodation Form. Disability accommodations or status will not be indicated on academic transcripts. In order to receive accommodations in a class, students with sensory, learning, psychological, physical or medical disabilities must provide their instructor with a Faculty Accommodation Form to sign. Students must return the signed form to the ACCESS Coordinator. **A new form must be requested each semester.** Students with a history of disability, perceived as having a disability, or with a current disability who do not wish to use academic accommodations are also strongly encouraged to register with the ACCESS and Accommodation Office and request a Faculty Accommodation Form each semester. For further information, please contact Carole Burrowbridge, Director and ADA/504 Coordinator, at 301-2778, or visit the ACCESS and Accommodation Office website at <http://www.mercer.edu/disabilityservices>.

## 9 FERPA Disclaimer for Assessment

The College of Liberal Arts is keenly interested in assuring the quality and integrity of its General Education Program. Every semester, randomly-selected students from each General Education course will be required to submit samples of their work to an independent and objective assessment by faculty. No personally identifiable information about any student will be used for the purposes of this assessment, and assessment results will have no bearing whatsoever on student grades.

## 10 Starfish

This course will use Mercer's web-based success platform, Starfish. Throughout the term, you may receive Starfish emails containing feedback. These communications are sent to support your success at Mercer. You can access Starfish through your MyMercer portal.

## 11 Important Dates

- No class MON Jan 16th (MLK Day)
- 1st Test FRI Feb 17th
- No class MON Mar 6th - FRI Mar 10th (Spring Break)
- Last day to Withdraw THU Mar 23rd
- 2nd Test WED Apr 5th
- No class FRI Apr 7th (BEAR Day)
- No class FRI Apr 14th (Good Friday)
- Last day of class FRI Apr 28th
- Final exam MON May 1st, 9:00 AM - 12:00 PM