

PHYS 1210 University Physics I

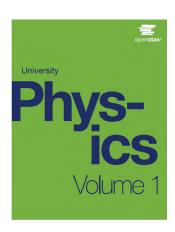


Professor: Dr. Laura Stiles-Clarke

PHYS 1210 (University Physics I) is a course for students who have taken grade 12 physics or PHYS 1190 at SMU. There are many resources to help you succeed in this course, and the primary one is the course Brightspace page. This page has all the information and links you will need, and it will be available to registered students during the week before classes begin. I will show you how to use the site on the first day of class. The other course resources are listed here and the Brightspace page will give other sites that might be helpful if you have questions.

Textbook

We will be using an online textbook called *University*Physics Volume I by Moebs, Ling, and Sanny.



You can find it here: openstax.org/details/books/university-physics-volume-1

You can download a free PDF of the textbook, view it in a browser, or purchase a paper copy if you wish. we will cover material from chapters 1-10 during PHYS 1210; you can start right now by pre-reading as many chapters as you would like. The course syllabus will give details about the specific sections we will cover.

Quizzes and Homework

The homework for our class will be done through the Brightspace platform. Each week, you will be expected to read the assigned sections of the textbook and answer questions about them **BEFORE that week's classes begin**. This will make up your homework grade. Again, you can start right away by reading the textbook chapters. The first assignment will be due after our first class, but before the first full week of classes.

Course Structure

Many of the topics in this course were probably part of your high school physics courses. However, the conventions and assumptions used in PHYS 1210 may be very different from what you have seen before. It is very important that you make an effort to fully understand the concepts in depth and not memorize or rely on surface-level understanding. The best ways to do this are completing the readings and other assigned work on time (or early!) and participating during classes.



This course is designed based on best practices in undergraduate physics education, which is my area of research. You may find some of the methods different from your other courses. I hope you will come to the course with an open mind, a willingness to participate in a learning community, and a curiosity about how the universe works.

Calculators

(the same requirements for CHEM 1210)



What type of calculator do I need? A scientific non-graphical calculator that is easy to do exponents and y^x functions. The Casio fx-991 or Casio fx-300 work well. Other models are fine as well. You cannot use your cell phone as a calculator!

Lab Manual

As part of PHYS 1210, you will have registered for a weekly 3-hour lab session. These sessions will begin the week of **September 8**.

These sessions are a combination of physics tutorials and laboratory activities (called labatorials), and you will do them in groups that we will assign.

PHYSICS 1210
University Physics I
LABATORIAL MANUAL

Fall 2025
Astronomy & Physics
Saint Mary's University

Before you arrive at your first lab, you will

need to purchase a PHYS 1210 Laboratory Manual from the SMU Bookstore.

You must bring your lab manual with you to every lab session, **including the first one**, because you will be graded on work that you do in the lab manual.

Download the textbook right away and start reading chapter 1.

See you on the first day of class.

