College Physics II

PHYS 2020

Course Description

Continuation of PHYS 2010. Laws of electricity and magnetism optics and light, modern atomic theory, nuclear physics and an overview of relativity. It is recommended that students take PHYS 2025 in the same semester as this course.

Prereq: PHYS 2010

Semester: All

This is an algebra and trigonometry based course on Electricity and Magnetism, Optics, Quantum Mechanics and Nuclear physics.

Course Student Learning Outcomes

- Teach students to recognize and understand the following physics principles in their everyday lives: Electricity, Magnetism, Optics and light, Modern atomic theory, Nuclear physics, Relativity and the applications of these principles in the world around us.
- Help students learn to think critically and solve physics problems.
- Help students gain a solid scientific foundation that will enable them to succeed in their professional programs.

Course Prerequisites

Prerequisite: Physics 2010

Recommended Corequisite: Physics 2025

Communication Plan

Our main communication mode will be the Canvas email inbox but don't hesitate to use the phone [redacted]

The communication mode of you come to class and then do the assignments in canvas and that's it you will probably have serious trouble. If you find yourself stuck get help from me. The cycle of student to instructor to student is essential for success.

Keys for Success (how to succeed in the course)

Physics takes time. Your instructor will have information about ways to study and answer questions and word problems that will help with the time problem and improve your grade. **Pay attention to them!**

Physics usually requires different modes of study. Memorization should not be your prime study method. And common sense is unreliable. Instead, learn the terminology and then the concepts, apply the concepts and accept the logical consequences of that application.

Take good notes.

Ask questions relentlessly. You've paid for the right to do that so use it!

Mistakes are the friends that no one wants. Pay attention to yours People who pay attention to their mistakes get better at what they are doing.

Don't give up. Physics can be hard but it is not impossible. Persistence is highly underrated in Physics. Be stubborn.

Maintain a positive attitude. Be kind to yourself instead of being too critical! Most people who get a test score that is lower than they want are way too harsh on themselves.

Required Text or Materials

Title: College Physics Openstax
Subtitle: (available free online)
ISBN: Hardcover: ISBN-13: 978-1-711470-83-2, Paperback: ISBN-13: 978-1-711470-82-5
Authors: Senior Contributing Authors Paul Peter Urone, California State University, Sacramento Roger Hinrichs, State University of New York, College at Oswego Contributing Authors Kim Dirks, University of Auckland Manjula Sharma, University of Sydney Kenneth Podolak, State University of New York, Plattsburgh Henry Smith, River Parishes Community College
Publication Date: July 13, 2022
Edition: Second
For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Brief Description of Assignments/Exams

There will be 4 tests, each worth 100 points.

Wednesday 9-18 Test 1 (chapters 18-21)

Wednesday 10-16 Test 2 (chapters 22-24)

Monday 11-11 Test 3 (chapters 25-27)

Wednesday 12-11 Test 4 (chapters 29-32)

Wednesday: Chapter homeworks will be weighted equally at 10 points each. All chapter homeworks will be done with the WebAssign software. You can access the WebAssign software by using the "Access WebAssign Here" link in the modules. You will not be required to pay any additional fee or need a class key. Do not try to access WebAssign by going through its parent company Cengage.

Some in class work and some other homework will be the other component of your overall grade.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Test 4 Discussion	Discussion	0
9/18	Error 1	Assignment	0
9/23	Error 2	Assignment	0
9/23	Test 1	Assignment	100
9/23	Chapter 18 Homework	Assignment	10
9/23	Chapter 19 Homework	Assignment	10
9/23	Chapter 20 Homework	Assignment	10
9/23	Chapter 21 Homework	Assignment	10
9/25	Test 1 Nice	Assignment	0

Due Date	Assignment Name	Assignment Type	Points
9/30	Mag force & flux eqns	Assignment	7
10/9	Test 1 Point Recovery	Assignment	0
10/16	Error 3	Assignment	0
10/16	Pipe Exp	Assignment	100
10/16	Test 2	Assignment	100
10/16	Chapter 22 Homework	Assignment	10
10/16	Chapter 23 Homework	Assignment	10
10/16	Chapter 24 Homework	Assignment	10
10/21	Mirror Pred	Assignment	4
10/21	Test 2 Nice	Assignment	0
11/4	Test 2 PR	Assignment	0
11/11	Chapter 25 Homework	Assignment	10
11/11	Chapter 26 Homework	Assignment	10
11/11	Chapter 27 Homework	Assignment	10
12/11	Chapter 29 Homework	Assignment	10
12/11	Chapter 30 Homework	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
12/11	Chapter 31 Homework	Assignment	10
12/11	Chapter 32 Homework	Assignment	10

Grading Scale

A 93-100%	B+ 87-89%	C+ 77-79%	D+ 67-69%	E <59%
A- 90-92%	B 83-86%	C 73-76%	D 63-66%	
	B- 80-82%	C- 70-72%	D- 60-62%	

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions

or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar