

College Physics II

PHYS - 2020 002

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

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.

College Wide Student Learning Outcomes

- Acquiring substantive knowledge in the field of their choice
- Developing quantitative literacy

- Developing the knowledge and skills to be civically engaged
- Thinking critically
- Communicating effectively

Course Prerequisites

PHYS 2010 - College Physics I

Engagement Plan

I will respond to email within 2 business days. A business day is a Monday-Friday day that the college is open and courses are held. An email received on Friday can be expected to be answered by Tuesday. I will offer feedback on major assignments within 1 week. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Keys for Success (how to succeed in the course)

SUCCEEDING IN A PHYSICS CLASS

Physics is a challenging course, however there are many available resources to help you succeed.

STRATEGIES FOR SUCCESS:

PUT IN THE TIME, STAY ON SCHEDULE! It is very important in this class that you set aside time each day to work on the course so that you can remain on schedule. You can do a better job at both understanding and retaining the material if you learn at an even pace. Trying to “cram” too much in one sitting will result in frustration and lower retention of the material. Recognize that you need time both to learn the material and time to complete your homework, etc. It will take a significant investment of time each day to be

successful in this course. It is important that you have the course calendar readily available and refer to it frequently.

LEARN HOW TO LEARN AND WHERE TO GET HELP: As with any STEM course, you need to find the best way for you to learn the concepts and skills. There are many options, including reading the textbook, taking notes, listening to an audio lecture, watching a video lecture, and many others. It is also crucial that you seek help when you need it. At the very beginning of the course, you should spend time familiarizing yourself with available resources.

The STEM Learning Resources department works in collaboration with the Mathematics department to provide a variety of free academic support services. These services include tutoring, workshops and project-based learning. For times and locations please go to this website: <http://www.slcc.edu/stem/hours.aspx>

USE THE SLCC RESOURCES: General Learning Support & Tutoring Services provide support for SLCC students enrolled in any class at the College. All resources are provided free-of-charge. Ask your instructor about discipline-specific learning support and tutoring services.

Tutoring:

STEM Learning Centers: provide free assistance in Math, Science, Accounting, CSIS and Allied Health Classes at 6 campus locations.

Student Writing Center: provides in-person and online feedback on all writing assignments.

Academic Literacy Center: provides tutoring in reading and conversation.

Library Services: provides research help, print and online resources, computers and study space.

ePortfolio Lab: provides drop-in assistance for all ePortfolio questions.

eLearning Support: provides support for navigating online and hybrid classes.

Business Resource and Innovation Center: provides tutors and a study space for students in Business and CSIS courses.

Brief Description of Assignments/Exams

HOMEWORK: Homework is assigned via WebAssign. The assigned homework exercises are the required minimum for you to demonstrate the learning objectives of the course and the mastery of the course concepts. You are encouraged to work more exercises than those assigned. Regular practice is essential in learning physics. You should be prepared to spend at least two hours studying outside of the class for each hour you spend in class. Many students find that much more time is required to perform as well as they desire on exams. Homework will be submitted online. Details of how and when homework is due will be discussed in class.

IN CLASS POP-QUIZZES: Throughout the semester various activities or quizzes are assigned in class. These will allow you to engage with the course material, explore applications and discuss concepts with other classmates. Some of these may be quite short, some will take longer. In class work cannot be made up.

MID-TERM EXAMS: The midterm exams will be taken in the testing center on the dates offered on the calendar. There will be 3 midterm exams and these tests will be closed book and closed note. You may, however, use one 3.5x5 inch notecard with anything you want written on it. You may use both sides. Electronic aids other than a calculator (with no internet connectivity) will not be allowed. The dates of these exams can be found on the calendar, which is on Canvas. You **MUST** sign up for a time to take the exam, and it is advised to do so with a sufficient time to ensure that the testing center has open seats for you! For testing center open times see <https://slcc.edu/testing/locations-and-hours.aspx> and for registration instructions, please see <https://slcc.edu/testing/online-testing/index.aspx>

EXTRA CREDIT: After exams are graded and returned, you will have an opportunity to rework any problem marked down to receive 1/3 of the points back. Your work must be written cleanly on a separate sheet and stapled to your original exam. Your work must be clear, and you must write AT MINIMUM one sentence describing where the mistake in your original exam work was, and what you did differently in your rework. Sloppy or

incomplete work WILL NOT be regraded. Please refer to the extra credit instructions on canvas!

FINAL EXAM: The final exam (Exam 4) for this course will be comprehensive but largely focused on the last chapters of the course after the previous midterm exam. It will be taken in the testing center on one specific date listed on the calendar. Similarly to the midterm exams, this exam will be closed book and closed note. You will still be allowed a 3.5x5 inch notecard with anything you want written on it. You may use both sides. Electronic aids other than a calculator (with no internet connectivity) will not be allowed. The dates of these exams can be found on the calendar, which is on Canvas. You **MUST** sign up for a time to take the exam, and it is advised to do so with a sufficient time to ensure that the testing center has open seats for you! For testing center open times see <https://slcc.edu/testing/locations-and-hours.aspx> and for registration instructions, please see <https://slcc.edu/testing/online-testing/index.aspx>

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Questions for your Instructor	Discussion	0
8/27/25	Pop Quizzes Randomly Given throughout Semester	Assignment	0
9/29/25	Chapter 18 Homework	Assignment	10
9/29/25	Chapter 19 Homework	Assignment	10
9/29/25	Chapter 20 Homework	Assignment	10
9/29/25	Chapter 21 Homework	Assignment	10
9/29/25	Exam 1	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
9/30/25	Exam 1 - Reworks	Assignment	0
10/27/25	Chapter 22 Homework	Assignment	10
10/27/25	Chapter 23 Homework	Assignment	10
10/27/25	Chapter 24 Homework	Assignment	10
10/27/25	Exam 2	Assignment	100
10/28/25	Exam 2 - Reworks	Assignment	0
11/17/25	Chapter 25 Homework	Assignment	10
11/17/25	Chapter 26 Homework	Assignment	10
11/17/25	Chapter 27 Homework	Assignment	10
11/17/25	Exam 3	Assignment	100
11/18/25	Exam 3 - Reworks	Assignment	0
12/15/25	Chapter 29 Homework	Assignment	10
12/15/25	Chapter 30 Homework	Assignment	10
12/15/25	Chapter 31 Homework	Assignment	10
12/15/25	Chapter 32 Homework	Assignment	10
12/15/25	Final Exam	Assignment	100

Grading Scale

A	93-100%
A-	90-92.9%
B+	87-89.9%
B	83-86.9%
B-	80-82.9%
C+	77-79.9%
C	73-76.9%
C-	70-72.9%
D+	67-69.9%
D	63-66.6%
D-	60-62.9%
E	Below 60%

Academic Integrity

- Academic Dishonesty: SLCC defines academic dishonesty as any action that misrepresents a student's work or knowledge, including plagiarism, cheating, and falsifying information.
- Plagiarism: Plagiarism, which involves presenting someone else's work as your own, is explicitly prohibited. This includes using wording, methods of citation, or arrangements of ideas from others without proper attribution.
- Cheating: Cheating encompasses a range of dishonest actions during exams or assignments, such as using unauthorized materials, having someone else take an exam, or altering work after it's been graded.
- Penalties for Academic Dishonesty: SLCC faculty may impose a grade of "0" on an assignment for a first offense. A second offense can result in a failing grade for the course, reported to the Registrar and the Office of Student Services, and placed on the student's permanent record.
- Code of Conduct: The SLCC [Student Code of Conduct](#) outlines students' rights and responsibilities, including expectations for academic integrity and the consequences of violating these standards.

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.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

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, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. 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, visit the [Institutional Syllabus](#) page under the Advising and Counseling

Support Services tab. 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](#)

Additional Policies

Electronic Devices in the Classroom: No video or audio recording in the classroom is allowed without written authorization from the instructor. Cell phones and other electronic devices should be in silent mode and should not be on the desk during lectures, tests, and final exam. In case of emergency, students should exit the classroom before they email, text, or use their cell phones. If students choose to use a computer or electronic device to take notes, they may do so without distracting their classmates. Computer activities that are not related to the class directly should not be done during class time. Students who text, talk on their cell phone, or use their devices to do activities not directly related to the class may be asked to leave the classroom.