

PHYS 1302.010

General Physics II

Spring, 2022, MWF 9:00am - 9:50am
VIN 160



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Office Hours: MTWRF 11:00a-12:00p

Course Information

Course Description

Study of electricity, magnetism, light, and atomic physics. (This course will not count as the introductory physics course for physics majors and pre-engineering majors.)

Prerequisite and Co-requisite Courses

Concurrent enrollment in or credit for, Physics 1102 is required. Prerequisite: PHYS 1301 or equivalent

Prerequisite Skills

Students are to be proficient with a scientific calculator and algebra.

Student Learning Outcomes

Upon completion of this course, students will:

1. Gain factual knowledge in physics,
2. learn fundamental principles of physics, and
3. apply course material to problem solving.

Course Delivery

This is a Face-To-Face course offering with some material through [Blackboard](#).

Required Texts and Materials

The textbook "[*College Physics*](#)" is available from OpenStax College for free. You will also need a scientific calculator. You do not need to purchase this textbook. A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

You will need a webcam for use with Respondus LockDown Browser and Monitor. You will also need a picture ID for Respondus Monitor. [More info below](#).

Technology Requirements

To successfully complete this course, students need to have access to a smart phone with camera, a printer, a capable computer with Microsoft Office, Respondus LockDown Browser, a webcam, and a picture ID such as your student ID card. You will also need a scientific calculator.

Respondus LockDown Browser and Monitor

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that's built into your computer or one that plugs in with a USB cable. This brief video will give you a basic understanding:

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=384131921>

Once Installed

Start LockDown Browser
Log into Blackboard Learn
Navigate to the test

Note: You won't be able to access tests with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

When taking an online test, follow these guidelines:

- Have a picture ID such as your student ID card available.
- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it

- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
 - Avoid wearing baseball caps or hats with brims
 - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
 - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
 - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
 - Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Several resources are available if you encounter problems:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- Respondus has a Knowledge Base available from www.support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product
- If you're still unable to resolve a technical issue with LockDown Browser, go to www.support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it

Communication

Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address and Blackboard. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone, Collaborate, Skype, etc.

Grading

Course grades will be determined as indicated in the table below.

Assessment	Percentage
Homework, Attendance, Daily grades	30%
Exams 1 - 3	51%*
Exam 4	19%*
Total	100%

*If beneficial, Exam 4 grade will replace lowest of Exams 1 – 3. Replaced exam grade must be higher than 50% to be replaced. Missed Exams or Exam grades lower than 50% will not be replaced.

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

A = 90% +

B = 80% – 89.99%

C = 70% – 79.99%

D = 60% – 69.99%

F = Less than 59.99% (Grades are not rounded up)

Assignment and Exam Descriptions

There are three methods of assessment for Student Learning Outcomes:

- Attendance, participation, and daily grades will be 10% of your total grade.
- Each chapter will have problems and exercises that will be 20% of your total grade. These assignments will be completion based. In other words, even if your homework assignment is wrong, you get full credit if you legitimately attempt it and turn it in. This accomplishes two things. First, you are encouraged to understand the HW rather than simply copying answers. Second, you can use the solutions as a tool to teach you rather than simply copying answers. Note that the assigned problems are the Problems and Exercises in the Openstax Text book and NOT the Conceptual Questions. You will need to submit these homeworks as a [single PDF](#).
- Each exam will be online with the [Respondus Lockdown Browser and Monitor](#) to prevent any sort of classmate collaboration or online tutor site such as Chegg, Coursehero, Skooli, BookFinder, Homiee, Upswing, Byju's, Buddy School, etc. Your notes, textbook, homeworks, and a calculator will all be available to you during exams. You will have 3 attempts at each exam with the highest grade

counting. Each of the four exams are worth 17% of your grade. If advantageous to your grade, Exam 4 will replace your lowest of Exams 1,2, and 3. As mentioned above, you will need to score at least a 50% for your lowest exam grade to be replaced by the final exam grade.

Due Dates and Late Work

- All in-class work cannot be made up if you are absent regardless of excuse. Since this is only 10% of your grade, it is possible to attend 0 days and still earn an A.
- The course schedule provides all homework due dates. Due dates are usually the next class day after chapter lectures are concluded. Every day that a HW is late, the HW will lose 10% value. If the HW is 4 days late, the maximum score is 60%.
- Exam deadlines are at midnight of the exam day in the syllabus. Since you will have several days to complete each exam online there are no exam extensions or makeups. Be sure to complete your work on time.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)¹
- [Angelo State University Catalog](#)²

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#)³ (Page 97).

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the

student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁴ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)⁵ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity Statement](#)⁶ in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).⁷

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 [Student Absence for Observance of Religious Holy Day](#)⁸ for more information.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)⁹

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).¹⁰

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)¹¹ web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

Course Schedule

Lec. #	Day	Openstax	Topic	HW	HW DUE
	17-Jan	Holiday			
1	19-Jan	Syllabus			
2	21-Jan	Ch18 §1-2	Charge & Conductors	1,7	
3	24-Jan	Ch18 §3-4	Coulomb's Law	13,25,32	
4	26-Jan	Ch18 §5-8	Electric Fields	33,37,56	
5	28-Jan	Ch19 §1-3	Electric Potential	6,17,29	Ch18
6	31-Jan	Ch19 §4-7	Capacitors	38,50,59,66	
7	2-Feb	Ch20 §1-3	Current & Resistance	7,19,37	Ch19
8	4-Feb	Ch20 §4-7	Electric Power	55,83,89	
9	7-Feb	Ch21 §1-2	Combining Resistance	1,15	Ch20
10	9-Feb	Ch21 §3-5	Kirchhoff's Rules	31,50,58	
11	11-Feb	Ch21 §6	RC Circuits	69	
12	14-Feb	REVIEW			Ch21
13	16-Feb	EXAM 1			
14	18-Feb	Ch22 §1-3	Magnets and Fields		
15	21-Feb	Ch22 §4-6	Magnetic Force	1,13,25	
16	23-Feb	Ch22 §7-9	Ampere's Law	36,42	
17	25-Feb	Ch22 §10-11	Mass Spectrometer	50,77	
18	28-Feb	Ch23 §1-2	Magnetic Induction	1,14	Ch22
19	2-Mar	Ch23 §3-5	Electric Motor	16,27,31	
20	4-Mar	Ch24 §1-2	Maxwell's Equations	1	Ch23
21	7-Mar	Ch24 §3-4	Electromagnetic Waves	23,31	
22	9-Mar	REVIEW			Ch24
23	11-Mar	EXAM 2			
	14-Mar	Holiday			
	16-Mar	Holiday			
	18-Mar	Holiday			
24	21-Mar	Ch25 §1-4	Reflection & Refraction	1,7,13,22	
25	23-Mar	Ch25 §5-6a	Dispersion & Lenses	33,39	
26	25-Mar	Ch25 §6b-7	Images	49,57	
27	28-Mar	Ch26 §1-3	The Eye	2,14	Ch 25
28	30-Mar	Ch26 §4-6	Telescopes & Microscopes	37	
29	1-Apr	Ch27 §1-3	Wave Interference	1,7	Ch26
30	4-Apr	Ch27 §4-6	Diffraction	25,48,62	

31	6-Apr	Ch27 §7-8	Thin Films & Polarization	73,92	
32	8-Apr	REVIEW			Ch27
33	11-Apr	EXAM 3			
34	13-Apr	Ch29 §1-2	Energy Quantization	1,13	
35	15-Apr	Ch29 §3-7	Duality	21,66	
36	18-Apr	Ch30 §1-2	The Atom	1	Ch29
37	20-Apr	Ch30 §3-5	Atomic Energies	12,26,33	
38	22-Apr	Ch30 §6-9	Other Quantizations		
39	25-Apr	Ch31 §1-2	Nuclear Activity	1	Ch30
40	27-Apr	Ch31 §4-5	Half-Life	28,46	
41	29-Apr	Ch32 §1-2a	Medical Imaging	6,10	Ch31
42	2-May	Ch32 §2b-4	Radiation Therapy	21	
43	4-May	Ch32 §5-7	Fusion & Fission	51	
44	6-May	REVIEW			Ch32
	11-May	FINAL EXAM (May 11th @8am)			

¹ <https://www.angelo.edu/current-students/student-handbook/>

² <https://www.angelo.edu/academics/catalog/>

³ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

⁴ <https://www.angelo.edu/current-students/disability-services/>

⁵ <https://angelo.policystat.com/policy/10659448/latest/>

⁶ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

⁷ https://www.angelo.edu/current-students/writing-center/academic_honesty.php

⁸ <https://angelo.policystat.com/policy/10659368/latest/>

⁹ <https://www.angelo.edu/incident-form>

¹⁰ <https://www.angelo.edu/title-ix>

¹¹ <https://www.angelo.edu/covid-19/>