

# PHYSICS 1302030

## GENERAL PHYSICS II

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Office: Vincent 125

**Office Hours: By email appointment**

## 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

Prerequisite: Physics 1301 or equivalent.

### Prerequisite Skills

Ability to use a scientific calculator and proficiency in college algebra are expectations of the course.

### Student Learning Outcomes

Upon completion of this course, students will be able to:

- gain factual knowledge in physics,
- learn fundamental principles of physics, and
- apply course material to problem solving.

### Course Delivery

This course is a face-to-face course with learning resources and supplementary materials posted in Blackboard.

### Required Texts and Materials

The textbook "College Physics" is available from OpenStax College for free. You also need a scientific calculator. 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.

## Technology Requirements

To successfully complete this course, students need to be able to use Blackboard, a scientific calculator, and complete the IDEA student ranking of instruction.

## 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.

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

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

## Grading

### Evaluation and Grades

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

Assessment	Percent of Total Grade
Best 3 of 4 Exams	60
In-class Activities	30
Physics Concept Inventory	10
Total	100%

### 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 = 90.00-100 points

B = 80.00-89.99 points

C = 70.00-79.99 points

D = 60.00-69.99 points

F = 0-59.99 points (Grades are not rounded up)

### Assignment and Activity Descriptions

Attendance is required. Makeup exams must be pre-arranged with the instructor before the scheduled exam dates on this syllabus. Online assignments are uploaded in Blackboard. The lowest exam grade will be dropped from the final grade calculation. An academic assessment will be given late in the semester to assess this course as required by the institution.

# 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](#)<sup>1</sup>
- [Angelo State University Catalog](#)<sup>2</sup>

## 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](#).<sup>3</sup>

## 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](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#).<sup>4</sup> The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
[dallas.swafford@angelo.edu](mailto: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](#)<sup>5</sup> for more information.

## Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)<sup>6</sup> 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](#).<sup>7</sup>

## 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](#)<sup>8</sup> for more information.

## Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Miller, J.D.

Special Assistant to the President and Title IX Coordinator

Mayer Administration Building, Room 210

325-486-6357

[michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

You may also [file a report online](#)<sup>9</sup> 24/7.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information, visit the [Title IX website](#).<sup>10</sup>

# Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification.

## Course Schedule

Date	Topic	Review Problems
Jan 18	Electric Charge	2, 14, 41
Jan 20	Electric Fields	30, 39, 42
Jan 25	Electric Potential	15, 27, 37
Jan 27	Capacitance	47, 57, 63
Feb 1	Current and Resistivity	3, 16, 34
Feb 3	<i>University Closed</i>	
Feb 8	Resistance and Ohm's Law	21, 29, 44
Feb 10	DC Circuits I	17, 25
Feb 15	DC Circuits II	7, 31, 39
<b>Feb 17</b>	<b>Exam 1</b>	
Feb 22	Magnetism and Magnetic Force	3, 33, 39
Feb 24	<i>University Closed</i>	
Mar 1	Other Types of Magnetism	13, 25, 58
Mar 3	Electromagnetic Induction	2, 9,
Mar 8	Inductors and Energy Storage	19, 29, 57, 64
Mar 10	Electromagnetic Waves	7, 12, 21
<i>Mar 14-18</i>	<i>Spring Holidays</i>	3, 31, 35
Mar 22	Properties of EM Waves	
<b>Mar 24</b>	<b>Exam 2</b>	
Mar 29	Reflection and Refraction	5, 12, 21
Mar 31	Mirrors and Lenses	42, 46, 55
Apr 5	Vision and Optical Instruments	5, 9, 27, 35
Apr 7	Wave Optics -Interference	
April 12	Wave Optics-Diffraction	7, 71
Apr 14	<b>Exam 3</b>	21, 43, 85
Apr 19	Quantum Physics I	5, 11, 23
Apr 21	Quantum Physics II	39, 51, 63
Apr 26	Radioactivity	31: 41, 71
Apr 28	Nuclear Decay	31: 23, 25, 56
Apr 3	Nuclear Reactions	32: 21, 48
May 5	Review and Physics Concept Inventory	
<b>May 12</b>	<b>Exam 4 (8-10 am)</b>	

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

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

<sup>3</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

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

<sup>5</sup> <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

<sup>6</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

<sup>7</sup> [https://www.angelo.edu/current-students/writing-center/academic\\_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)

<sup>8</sup> <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>

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

<sup>10</sup> <https://www.angelo.edu/title-ix>