

## Physics 1302 – General Physics Course Syllabus – Spring 2022

### **Instructor Information**

James Holloway

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Office Hours: BLUE Days 8:00am-10:32am / GOLD Days: 2:30pm-4:00pm

### **Course Description**

Study of electricity, magnetism, light, and atomic physics. (This course will not count as the introductory physics course for physics majors). Prerequisite: MATH 1314 or equivalent.

### **Course Information**

**Time:** Blue Days (Lunch 12:13-12:48)

**Location:** Rm: 1010 in science hall or CT-3 in CTE Building

**Text:** *College Physics*, OpenStax College

The textbook may be freely downloaded in both PDF and EPUB formats at <http://openstaxcollege.org/textbooks/college-physics>. A hardbound printed copy may be purchased from the ASU Bookstore, or through Amazon

**Calculator:** any Scientific Calculator (NO CALCULATORS WILL BE PROVIDED) **CELL PHONES NOT PERMITTED TO BE USED AS CALCULATORS ON TEST.**

**Notebooks:** <https://getrocketbook.com/products/everlast-rocketbook> this will allow you to convert your notes to a digital files will be the last notebook you will ever needs, its reusable.  
/or/ any sketchbook, blank pages allow for better organization of physics notes

### **Course Attendance**

Course attendance is the responsibility of the student. Attendance will be taken at each class meeting. In-class activities or quizzes may not be made up. Exams may be made up only under special circumstances.

### **Late Work Policy**

Homework is due on the designated date and time. It will become unavailable in Schoology after that time. No late submissions of homework will be accepted.

### **Course Evaluation**

Course grades are calculated using labs and exams.

Exams (Assessments and Quizzes) 50%

Labs 50%

ASU requires a semester final, and it will be calculated into your FHS grade as a test grade.

At least once per chapter, students will complete a homework worksheet with problems related to the chapter material. The worksheets are posted in Schoology and you should submit your answers

through Schoology. Exams will consist of multiple choice and open-ended questions based on lecture notes, homework, and the textbook chapters. All scores will be posted on Schoology but final score will be posted in Skyward. Students are responsible for checking these scores.

***Class time will be spent in three ways.***

Homework component will be digital requirements listed below:

- Content material will be delivered through the viewing of electronic material (i.e. YouTube, and personal made instructional video's).
- Class discussions will be held every class to go deeper into the content.
- Notes will be posted in a digital format for you to create a notebook of your choosing from, notes will be taken at home prior to the class needed. This will allow for tailored questioning in class on topics not understood or have misconceptions by the student.
- The following digital sources will be used, and we will create and sign up the first week of class.
  - a. Your Microsoft email address will be required for this class as well as the following resources:
  - b. TEAMS "Microsoft 365"
  - c. Schoology login
  - d. EDpuzzle login

***Application of the content will be geared to be completed in the classroom.***

- Video Lectures will be sent home as homework, this is where you will study the content and get your notes. The content you have issues and/or trouble with is what you bring to class so we can work-out the issues together. This allows us to spend more time on troubling issues instead of items you have no issue with, you will be expected to be prepared prior to class by having reviewed the video content.
- You will write several lab research projects in class, you will collect data, analyze your data, and draw your own conclusions about your lab experience. A detailed lab research report will be generated and turned into a scientific research poster (this will be covered in more detail in class): but will be due for every lab completed in class.
- Project Based Learning will be a major component in this class, collaboration on projects will be encouraged. Individuals can always choose to complete the project in its entirety by themselves.
- Class discussion provides you with the opportunity to question the text authors' interpretations, my presentations, your peers' assumptions, or simply to enlighten the class with your intellectual superpowers.
- If you know ahead of time you will be gone for an extended period, come talk to me so we can plan for you to make up the work. If an emergency occurs that will require an extended absence, let me know at your earliest (not latest) opportunity.
- Complete and submit assignments on schedule. Remediation of material to increase your grade can be scheduled with the instructor. No test will be allowed to be made-up unless prior approval or discussion with the instructor. Deadline to make up a test or retake a test will be one week after the first day of test administration. Quizzes will have a remediation of one time, within one week after administered and highest grade will be taken.
- A notebook created by yourself will be allowed to be used on quizzes and quizzes only. Spending time taking notes over the video lectures will be to the students benefit.
- ASU provides tutoring if needed, see instructor for details.
- Turn off your cell phones before class starts. **Answering phone calls during class time is prohibited.**

- Cell phones will have a pocket that will be required to be placed in as you walk into class and will not be accessed unless instructed by the instructor. Failure to comply could result in disciplinary.
- Answering your phone in class will result in disciplinary actions. I do not like to waste your time, and I expect the same respect from you not to waste mine.

## **GRADING/EVALUATION**

Following are the scores attached to each component of the class. It is a system that allows you to keep track of your progress, so you know where you stand as the semester progresses.

**Exams will consist of multiple-choice questions based on notes and lecture videos, open response per class discussions, and self-study problems. Use of any electronic device during a major exam is prohibited. An official stand-alone calculator will only be allowed: and they will NOT be provided to you.**

Thus, at the end of the semester:

- A = 90-100
- B = 80-89.99
- C = 70-79.99
- D = 60-69.99
- F = 0-59.99

**Deadlines will be posted or electronically date stamped by 11:59pm the day the assignment is due to receive credit for assignment:**

**Example: Deadline Monday, September 6, 2016 @11:59pm**

**Turned in stamped Tuesday, September 7, 2016 @12:00am**

**This assignment will be late and will not be accepted:**

Exceptions to this guideline will need to be discussed and planned with the instructor of the course prior to the day of the deadline: Documentation maybe requested by the instructor to support any claims and exemptions.

**Students will be responsible for checking their own grades in their personal SKYWARD account assigned by Frenship ISD. A final letter grade will be submitted to ASU upon completion of each semester. You will receive a letter grade for the class. Schoology grades in the Schoology Gradebook are not final, Skyward holds the final/up-to-date grades.**

## **Classroom Etiquette**

Mobile phones and music players must be turned off at all times. Note that this means that you cannot use a mobile phone as your calculator. Use of any electronic device other than your calculator during an exam is not allowed. Excessive noise or other disruptions will not be tolerated. Turn off your cell phones before class starts. **Answering phone calls during class time is prohibited.**

Cell phones will have a pocket that will be required to be placed in as you walk into class and will not be accessed unless instructed by the instructor. Failure to comply could result in disciplinary.

### **Course Objectives & Student Learning Outcomes**

Upon completion of this course, the student will have gained factual knowledge in physics, learned fundamental principles of physics, and applied course material to problem solving.

Student learning outcomes will be assessed by in-class exams, and your laboratory score.

### **Students with Disabilities**

Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center: to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made.

### **Academic Honesty**

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is available online [here](#).

### **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. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

### Physics 1302 Course Outline

<b>Dates</b>	<b>Class Schedule</b>	
	Conservation of Momentum	
	Conservation of Energy	
	Roller Coaster Project	
	<b>EXAM 1</b>	
	Simple Harmonic Motion	
	Linear Restoring Forces	
	SHM graphs	
	Simple Pendulum	
	Mass-Spring Systems	
	Design Experiment	
	Electrostatics and Electromagnetism	
	Electro Charge	
	Conservation of Charge	
	Coulomb's Law	
	<b>EXAM 3</b>	
	DC Circuits	
	Electric Resistance / Series & Parallel	
	Ohm's Law / Kirchoff's Law	
	<b>EXAM 4</b>	

### Physics 1402 Laboratory Schedule

<b>Dates</b>	<b>Laboratory</b>
	Introduction to Lab Reports
	Equipotentials and Electric Fields
	Ohm's Law and Resistivity
	The RC Time Constant
	The Magnetic Field of a Long Straight Wire
	Refraction and Snell's Law
	Thin Lenses
	The Hydrogen Atom Line Spectrum
	Half-Life of a Radioactive Isotope