

# FUNDAMENTALS OF PHYSICS I LABORATORY SYLLABUS

PHYS 2125, Section 02Z

Spring 2022

CRN 22434

R 02:00pm–04:50 pm

VIN 162

## CONTACT INFORMATION

Dr. Michael C. Holcomb

Office: VIN 123 and Dr. Holcomb's Virtual Office

Phone: [325.486.6787](tel:325.486.6787)

Email: [michael.holcomb@angelo.edu](mailto:michael.holcomb@angelo.edu)

Webpage: [www.mcholcomb.com/teaching](http://www.mcholcomb.com/teaching)

### Office Hours

Monday 11:00am-12:15pm

Tuesday 09:00am-10:45am

Wednesday 11:00am-12:15pm

Thursday 09:00am-10:45am

Friday 11:00am-12:15pm

*Also available by appointment or whenever my door is open!*

## REQUIRED MATERIALS

- Physics 2125 Laboratory Manual (2021 Edition) edited by Charles Allen
- Scientific Calculator (required to complete prelab assignments and lab reports)
- Gradescope Account – Free to ASU students; you will receive an email with more information.
- Access to a computer with reliable high-speed internet access.
- Access to a scanning device OR a handwriting-capable computer or tablet.

## COURSE OVERVIEW

Laboratory experience designed to accompany PHYS 2325 Fundamentals of Physics I. Experiments will explore aspects of mechanics, mechanical waves, and thermodynamics.

### Expected Learning Outcomes

The expected learning outcomes for the course, listed below, will be assessed through performance on prelab assignments and lab reports.

- Be able to apply scientific reasoning and critical thinking to the analysis of physical phenomena.
- Acquiring skills in working with others as a member of a team.
- Learning appropriate methods for collecting, analyzing, and interpreting numerical information.

## COURSE COMPONENTS

### Attendance

This course will be delivered in a traditional face-to-face format. Attendance is considered mandatory. You will be expected to attend every scheduled day and work collaboratively with group members to complete the day's assigned

lab. Failure to attend a scheduled lab meeting will result in a zero being issued for that day's lab report and associated prelab assignment. There are no makeups for labs, so please plan accordingly.

## Prelab Assignments

You are responsible for completing each prelab assignment prior to the day on which the associated lab is scheduled. Prelab assignments are provided in the lab manual preceding the lab report that they are paired with. You must scan your completed prelab assignment to PDF and then submit it for grading via Gradescope prior to the beginning of lab. Late prelab assignments will incur a 20% penalty without exception and will only be accepted through the submission deadline of the lab report they are associated with.

## Lab Reports

You are responsible for studying each lab report prior to the scheduled lab meeting. Lab reports are included in the lab manual, and you must bring your manual with you to every lab meeting. The lab manual is where you will complete the lab report in its entirety (i.e. record all data, complete all calculations, answer any associated questions, etc.) during the lab meeting. You will then scan your completed lab report to PDF and submit it for grading via Gradescope by midnight the that same day. Late lab reports will not be accepted, so please be mindful of the deadlines.

## Lab Practicum

A lab practicum will be administered during the last scheduled lab meeting of the term. The purpose of the lab practicum will be to evaluate your understanding of the laboratory techniques that were introduced and utilized throughout the term. This is not an evaluation that you can study for in the traditional sense; however, you should be well prepared so long as you attend and actively participate during every scheduled lab meeting.

## GRADING POLICIES

The following scores will be recorded during the course of the term: Prelab Assignments (20%), Lab Reports (60%), Lab Practicum (20%).

Your letter grade will be determined on the following scale: F ( $\leq 59$ ), D (60-69), C (70-79), B (80-89), A (90-100). The instructor reserves the right to lower the boundaries between letter grades at their discretion. The boundaries will never be raised above what is shown.

## Incomplete Grade Policy

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

## CLASSROOM ETIQUETTE

Attending lab meetings is mandatory. You are considered both advised and responsible for anything discussed during the lab meetings. Leaving lab early or arriving late is considered both rude and distracting. If you have an expected reason to depart early, please inform your instructor before the beginning of the lab meeting.

All students are expected to work collaboratively and productively with their peers during each lab meeting. If you become a distraction to other students, then you will be dismissed from the lab meeting for that day and issued a zero for the associated prelab assignment and lab report. Some actions, including but not limited to the following, will result in you being considered a distraction to your peers: repeatedly arriving late, reading unrelated material, using your cell phone in any way, sleeping, eating, "vaping," and the use of any and all tobacco products.

No laptops or any other electronic devices are allowed in class unless the need for such a device for reason of a disability is documented by Student Disability Services.

# INCLUSIVE LEARNING ENVIRONMENT

(Adapted from Yale Center for Teaching and Learning)

## Civility and Respect

Our university supports and wants to foster a civil, respectful, and open-minded climate so that all of us can live and work in an environment free of harassment, bias-motivated behaviors, unfair treatment, and fear. The university expects all members of our community to refrain from actions or behaviors that intimidate, humiliate, or demean persons or groups or that undermine their security or self-esteem based on traits related to race, ethnicity, country of origin, religion, gender identity/expression, sexual orientation, age, or physical or mental ability, including learning and/or developmental disabilities and past/present history of mental disorder or other category protected by state or federal law.

## Student Disability Services

Angelo State University 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](#). The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

### Point of Contact

#### Director of Student Disability Services

Dallas A. Swafford

Email: [dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)

### Office

Houston Harte University Center, Room 112

Office Email: [ada@angelo.edu](mailto:ada@angelo.edu)

Office Phone: [325.942.2047](tel:325.942.2047)

## Title IX

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.

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:

### Point of Contact

#### Director of Title IX Compliance and Title IX Coordinator

Michelle Miller, J.D.

Email: [michelle.miller@angelo.edu](mailto:michelle.miller@angelo.edu)

### Office

Mayer Administration Building, Room 210

Office Phone: [325.942.2022](tel:325.942.2022)

Report an incident: [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)

**Note from Dr. Holcomb:** Please note that 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](tel:325.942.2371)), the 24-Hour Crisis Helpline ([325.486.6345](tel:325.486.6345)), or the University Health Clinic ([325.942.2171](tel:325.942.2171)).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix).

### 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](#) for more information.

## 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 Statement of [Academic Integrity](#).

### Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#) 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](#).

### Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

## 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](#)
- [Angelo State University Catalog](#)

### Modifications to the Syllabus

All components of this syllabus are subject to modification at the lecturer's discretion. In particular, the ongoing COVID-19 pandemic may require changes in course delivery, grade evaluation, schedule, and content on potentially short notice.

## COURSE CALENDAR

Our tentative course calendar is below. I reserve the right to change this calendar as needed; however, I will inform you in class or via email in advance of any changes.

Remember to check our Blackboard class page regularly for class advisories and updates. Also remember to check your university email (RamMail) account regularly for other important university correspondence.

Week of	Activities, Assignments, and Due Dates	Laboratory Topics
Jan. 17	> <b>Purchase Lab Manual!</b> > <b>Complete Lab Safety Quiz via Blackboard!</b>	<b>NO LAB, Purchase Lab Manual!</b>
Jan. 24	<b>Thursday, Jan. 27:</b> Prelab DUE (02:00 pm) <b>Thursday, Jan. 27:</b> Lab Report DUE	Introduction to Lab Reports
Jan. 31	<b>Thursday, Feb. 03:</b> Prelab DUE (02:00 pm) <b>Thursday, Feb. 03:</b> Lab Report DUE	Motion with Constant Acceleration
Feb. 07	<b>Thursday, Feb. 10:</b> Prelab DUE (02:00 pm) <b>Thursday, Feb. 10:</b> Lab Report DUE	Projectile Motion
Feb. 14		<b>NO LAB</b>
Feb. 21	<b>Thursday, Feb. 24:</b> Prelab DUE (02:00 pm) <b>Thursday, Feb. 24:</b> Lab Report DUE	Newton's Second Law
Feb. 28	<b>Thursday, Mar. 03:</b> Prelab DUE (02:00 pm) <b>Thursday, Mar. 03:</b> Lab Report DUE	Conservation of Energy
Mar. 07	<b>Thursday, Mar. 10:</b> Prelab DUE (02:00 pm) <b>Thursday, Mar. 10:</b> Lab Report DUE	Momentum and Collisions
Mar. 14	Spring Break – no lab	<b>NO LAB</b>
Mar. 21	<b>Thursday, Mar. 24:</b> Prelab DUE (02:00 pm) <b>Thursday, Mar. 24:</b> Lab Report DUE	Rotational Equilibrium
Mar. 28	<b>Thursday, Mar. 31:</b> Prelab DUE (02:00 pm) <b>Thursday, Mar. 31:</b> Lab Report DUE	Archimedes' Principle
Apr. 04	<b>Thursday, Apr. 07:</b> Prelab DUE (02:00 pm) <b>Thursday, Apr. 07:</b> Lab Report DUE	The Pendulum
Apr. 11		<b>NO LAB</b>
Apr. 18	<b>Thursday, Apr. 21:</b> Prelab DUE (02:00 pm) <b>Thursday, Apr. 21:</b> Lab Report DUE	Speed of Sound
Apr. 25	<b>Thursday, Apr. 28:</b> Prelab DUE (02:00 pm) <b>Thursday, Apr. 28:</b> Lab Report DUE	Ideal Gas Law

Week of	Activities, Assignments, and Due Dates	Laboratory Topics
May 02	<b>Thursday, May 05: Lab Practicum</b>	<b>Lab Practicum</b>
May 09	Finals Week – no lab	<b>NO LAB</b>

\* All due times are 11:59 pm CST, unless otherwise specified.