Instructor: Dr. Kenneth Carrell  
Email: kenneth.carrell@angelo.edu  
Phone: (325) 942-2136  
Office: Vincent 119

Office Hours: MW 10am-noon, R 2-3pm, or by appointment

Course Information

Course Description
Laboratory experiences designed to accompany Physics 2325. Emphasis is placed on experiments utilizing the fundamental concepts of mechanics and thermodynamics.

Prerequisite and Co-requisite Courses
Concurrent enrollment in, or credit for, Physics 2325 and Mathematics 2413 is required.

Prerequisite Skills
Proficiency with Microsoft Windows is an expectation of this course.

Student Learning Outcomes
Upon completion of this course, students will be able to:
• Acquire skills in working with others as a member of a team
• Learn appropriate methods for collecting, analyzing, and interpreting numerical information

Course Delivery
This course is a hybrid course with all of the enrollment completing and submitting lab reports in Blackboard week 1, half of the enrollment attending live laboratory in Vincent 162 week 2, the remaining half of the enrollment attending live laboratory in Vincent 162 week 3, and then the cycle repeats. See the Course Schedule below to determine when to attend lab in Vincent 162 and when to complete labs in Blackboard.

Required Texts and Materials
• Physics 2125 Laboratory Manual by Charles Allen (2020 edition)
• Scientific calculator with one-variable statistics (average and standard deviation)
**Technology Requirements**
To successfully complete this course, students need to use a scientific calculator, Blackboard, and a graphing program like GNUPlot, Microsoft Excel or Google Sheets.

**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.

**Grading**

**Evaluation and Grades**
Course grades will be determined as indicated in the table below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prelabs</td>
<td>25%</td>
</tr>
<tr>
<td>Lab Reports</td>
<td>75%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

**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 = 90-100 points
- B = 80-89 points
- C = 70-79 points
- D = 60-69 points
- F = 0-59 points (half points are rounded up)

**Assignment and Activity Descriptions**
You are responsible for studying each lab prior to the lab meeting and completing the pre-lab assignment. All pre-lab assignments must be turned in before lab starts. Late pre-labs will incur a 20% penalty. If you arrive at lab a few minutes late, immediately turn your pre-lab in to the instructor. Each lab report is to be completed and handed in at the end of the lab period including all data, calculations, and answers to questions.

Pre-labs count for 25% of each lab score, lab reports count for 75% of each lab score. Your lowest lab score (pre-lab plus report) will be dropped before calculating your final lab grade.

All students enrolled in a laboratory science course are required to complete the ASU Lab Safety Quiz located in Blackboard prior to attending the third lab session of the semester or term.
Attendance
There are no makeups for labs. In exceptional circumstances, if you know ahead of time that you will not be in town due to a university obligation, you may be able to attend another lab section. You must contact the instructor at least three days ahead of time to discuss this attendance.

Classroom Conduct
Mobile phones and music players must be turned off at all times, except when being used for laboratory purposes. You cannot use a mobile phone as your calculator during an exam. Each student must bring his/her own lab manual to class. Additional copies are not available. Food, candy, gum, drinks, or tobacco is not allowed in the laboratory at any time.

Group work: you must work within your assigned group, or if you prefer, by yourself. You will not be allowed to work within some other group of your choice: that defeats the objective of learning dynamics of group work.

If you fail to follow basic lab rules or student code of conduct, you may be asked to leave the lab.

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

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.

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. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:
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 for more information.

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.

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 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.

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Course Schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Lab</th>
</tr>
</thead>
</table>
| Aug 17  | In Blackboard:  
|         | • Review Lab Expectations Video  
|         | • Review Syllabus  
|         | • Determine your assigned Group 1 or 2 by clicking on My Group  
|         | • Complete and Submit: Introduction to Lab Reports |
| Aug 24  | In VIN 162;  
|         | • Group 1 Complete and Submit: Motion with Constant Acceleration |
| Aug 31  | In VIN 162;  
|         | • Group 2 Complete and Submit: Motion with Constant Acceleration |
| Sep 7   | In Blackboard:  
|         | • Complete and Submit: Conservation of Energy |
| Sep 14  | In VIN 162;  
|         | • Group 1 Complete and Submit: Archimedes’ Principle |
| Sep 28  | In VIN 162;  
|         | • Group 2 Complete and Submit: Archimedes’ Principle |
| Oct 5   | In Blackboard:  
|         | • Complete and Submit: Momentum and Collisions |
| Oct 12  | In VIN 162;  
|         | • Group 1 Complete and Submit: Newton’s Second Law |
| Oct 19  | In VIN 162;  
|         | • Group 2 Complete and Submit: Newton’s Second Law |
| Oct 26  | In Blackboard:  
|         | • Complete and Submit: Projectile Motion |
| Nov 2   | In VIN 162;  
|         | • Group 1 Complete and Submit: Rotational Equilibrium |
| Nov 9   | In VIN 162;  
|         | • Group 2 Complete and Submit: Rotational Equilibrium |
| Nov 16  | No Lab, Dead Week |
| Nov 23  | No Lab, Final Exam Week |

1 https://www.angelo.edu/student-handbook/
2 https://www.angelo.edu/catalogs/