Instructor: Andrew B. Wallace
Email: awallace@angelo.edu
Phone: 3254866516
Office: Vincent 125

Office Hours: by email appointment

Course Information

Course Description
Study of mechanics, thermodynamics, and waves. (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 1101 is required. Prerequisite: Mathematics 1314 or equivalent.

Prerequisite Skills
Ability to use Blackboard, to use a scientific calculator, and proficiency in college algebra and trigonometry are expectations of this course.

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

- Gain a basic understanding of physics (e.g., factual knowledge, methods, principles, generalizations, theories)
- Learn to apply course material (to improve thinking, problem solving, and decisions)
- Acquiring skills in working with others as a member of a team (in-class problems)

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

Required Texts and Materials
“College Physics” is available from OpenStax College for free. You also need a scientific calculator to complete in-class problems. 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 use a scientific calculator, Blackboard, 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.

**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>Homework Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Highest 3 out of 4 Exam Grades</td>
<td>60%</td>
</tr>
<tr>
<td>Physics Concept Inventory</td>
<td>20%</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 = 90.00-100 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**
In-class homework assignments will assess written communication (CS), critical thinking (CT) and teamwork (TW). The Physics Concept Inventory will assess empirical and quantitative science (EQS).

**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 to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.3

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:

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 Procedures5 for more information.

Plagiarism
Plagiarism is a serious topic covered in ASU’s Academic Integrity policy6 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 Day8 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

You may also file a report online9 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.10

**Course Schedule**

<table>
<thead>
<tr>
<th>DATE</th>
<th>LESSON</th>
<th>REVIEW PROBLEMS</th>
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</thead>
<tbody>
<tr>
<td>Aug 23-25</td>
<td>Introduction</td>
<td>2, 7, 17, 25, 32</td>
</tr>
<tr>
<td>Aug 27-Sep 1</td>
<td>Kinematics</td>
<td>2, 9, 16, 23, 45</td>
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<tr>
<td>Sep 3</td>
<td>Two-dimensional Kinematics</td>
<td>11, 16</td>
</tr>
<tr>
<td>Sep 6</td>
<td>Fall Holiday</td>
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<tr>
<td>Sep 8-10</td>
<td>Two-dimensional Kinematics</td>
<td>2, 25, 40</td>
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<tr>
<td>Sep 13</td>
<td>EXAM #1</td>
<td></td>
</tr>
<tr>
<td>Sep 15-20</td>
<td>Dynamics</td>
<td>5, 13, 20, 35, 43</td>
</tr>
<tr>
<td>Sep 22-24</td>
<td>Friction, Drag, and Elasticity</td>
<td>2, 11, 22, 33</td>
</tr>
<tr>
<td>Sep 27-29</td>
<td>Statics and Torque</td>
<td>2, 7, 28, 37</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Problems</td>
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<tr>
<td>Oct 4-8</td>
<td>Work and Energy</td>
<td>2, 12, 18, 27, 38</td>
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<tr>
<td>Oct 11</td>
<td>EXAM #2</td>
<td></td>
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<tr>
<td>Oct 13-15</td>
<td>Fluid Statics</td>
<td>2, 12, 17, 36, 49</td>
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<tr>
<td>Oct 18-20</td>
<td>Fluid Dynamics</td>
<td>4, 19, 33</td>
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<tr>
<td>Oct 22-27</td>
<td>Oscillatory Motion and Waves</td>
<td>3, 11, 18, 24, 48</td>
</tr>
<tr>
<td>Oct 29-Nov 1</td>
<td>Physics of Hearing</td>
<td>6, 19, 33, 42</td>
</tr>
<tr>
<td>Nov 3</td>
<td>EXAM #3</td>
<td></td>
</tr>
<tr>
<td>Nov 5-10</td>
<td>Temperature, Energy, and Gases</td>
<td>4, 10, 28, 40, 53</td>
</tr>
<tr>
<td>Nov 12-15</td>
<td>Heat and Heat Transfer</td>
<td>3, 15, 32, 48, 59</td>
</tr>
<tr>
<td>Nov 17-22</td>
<td>Thermodynamics</td>
<td>2, 20, 29, 38, 48</td>
</tr>
<tr>
<td>Nov 24-26</td>
<td>Fall Holiday</td>
<td></td>
</tr>
<tr>
<td>Nov 29</td>
<td>EXAM #4</td>
<td></td>
</tr>
<tr>
<td>Dec 1-3</td>
<td>Review for Physics Concept Inventory</td>
<td></td>
</tr>
<tr>
<td>Dec 8</td>
<td>Physics Concept Inventory</td>
<td>In Blackboard</td>
</tr>
</tbody>
</table>

1. [https://www.angelo.edu/current-students/student-handbook/](https://www.angelo.edu/current-students/student-handbook/)
2. [https://www.angelo.edu/academics/catalog/](https://www.angelo.edu/academics/catalog/)
4. [https://www.angelo.edu/current-students/disability-services/](https://www.angelo.edu/current-students/disability-services/)
5. [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
7. [https://www.angelo.edu/current-students/writing-center/academic_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)
8. [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
9. [http://www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)
10. [https://www.angelo.edu/title-ix](https://www.angelo.edu/title-ix)