PHYS 1301.020
General Physics I
Fall 2020, VIN160, MWF 11a

Instructor: Trey Holik
Email: eddie.holik@angelo.edu
Phone: 325-486-5452
Office: VIN 121

Online Office Hours: MTWRF 9a-9:30a; MWF 9:30a-10a; TR 11a-12p
Online Office: https://tinyurl.com/DrHolikOnlineOffice

Course Information

Course Description
Study of Kinematics, Dynamics, Energy, Fluids, Waves, and Thermodynamics. (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 Skills
Students are to be proficient with a scientific calculator, algebra, and trigonometry.

Student Learning Outcomes
Upon completion of this course, students will:
1. Gain factual knowledge in physics,
2. Learn fundamental principles of physics, and
3. Apply course material to problem solving.

Course Delivery
This is a ‘flipped’ hybrid online and face-to-face course offering. Lectures will be posted via blackboard, viewed before class, and the once-per-week face-to-face classroom will be used for homework, recitation, review, and concept mastery.
Required Texts and Materials

The textbook “College Physics” is available from OpenStax College for free. You will also need a scientific calculator. You do not need to purchase this textbook. 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.

You will need a webcam for use with Respondus LockDown Browser and Monitor. You will also need a picture ID for Respondus Monitor. More info below.

Technology Requirements

To successfully complete this course, students need to have access to a smart phone with camera, a printer, a capable computer with Microsoft Office, Respondus LockDown Browser, a webcam, and a picture ID such as your student ID card. You will also need a scientific calculator.

Respondus LockDown Browser and Monitor

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that's built into your computer or one that plugs in with a USB cable. This brief video will give you a basic understanding:


Download and install LockDown Browser from this link:

https://download.respondus.com/lockdown/download.php?id=384131921

Once Installed

Start LockDown Browser
Log into Blackboard Learn
Navigate to the test

Note: You won't be able to access tests with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

When taking an online test, follow these guidelines:

- Have a picture ID such as your student ID card available.
- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims
  - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
  - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
  - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
  - Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Several resources are available if you encounter problems:
- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- Respondus has a Knowledge Base available from www.support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product
- If you're still unable to resolve a technical issue with LockDown Browser, go to www.support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it

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.

Written communication via email: All private communication will be done exclusively through your ASU email address and Blackboard. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.
Virtual communication: Office hours and/or advising may be done with the assistance of the telephone, Collaborate, Skype, etc.

Statement for Asynchronous Remote Sessions

To maintain academic quality while accommodating social distancing needs this semester, this course will use a split delivery model that combines face-to-face teaching with remote instruction.

The goal is to provide face-to-face instruction to students who want to return to campus, while also allowing students who may need to learn remotely to participate via virtual class sessions.

How Does It Work?

Your class will be divided and you will be placed into a smaller group of students to maintain physical distancing requirements in our assigned classroom space.

Your assigned group will receive a schedule of in-person class meetings. This schedule is not flexible. For instance, if you are supposed to attend class on a Monday, you cannot elect to go on Wednesday with another class group instead.

When you are not in the physical class, you will be responsible for completing assigned coursework in Blackboard. If beneficial, Exam 4 grade will replace the lowest of Exams 1 – 3.

Please refer to this Health and Safety web page for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Grading

Evaluation and Grades

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

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily grades, homework, participation</td>
<td>20%</td>
</tr>
<tr>
<td>Exams 1 - 3</td>
<td>60%*</td>
</tr>
<tr>
<td>Exam 4</td>
<td>20%*</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

*If beneficial, Exam 4 grade will replace lowest of Exams 1 – 3.

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% +
B = 80% – 89.99%
C = 70% – 79.99%
D = 60% – 69.99%
F = Less than 59.99% (Grades are not rounded up)

**Assignment and Exam Descriptions**

The semester will be grouped into five exam sections. Each exam section will cover three or four chapters. Due to the possibility of going completely online, this will be a ‘flipped’ course. Learning will take place OUTSIDE the classroom. You will be responsible to watch lectures outside the classroom BEFORE CLASS. The classroom will be used for homework, recitation, review, and concept mastery.

There are two methods of assessment for Student Learning Outcomes:

- Each chapter will have Problems and Exercises that will be 20% of your total grade. These assignments will be based on both weekly attendance and submission online.
  - Weekly attendance will be recorded based on seating location. Wherever you choose to sit will be your assigned seat the rest of the semester.
  - Grading is submission based. In other words, even if your homework assignment is wrong, you get full credit if you legitimately attempt it and turn it in. This accomplishes two things. First, you are encouraged to understand the HW rather than simply copying answers. Second, you can use the solutions as a tool to teach you rather than simply copying answers. Note that the assigned problems are the Problems and Exercises in the Openstax Text book and NOT the Conceptual Questions. You will need to submit these homeworks as a single PDF.

- Each exam will be online with the Respondus Lockdown Browser and Monitor to prevent any sort of classmate collaboration or online tutor site such as Chegg, Coursehero, Skooli, BookFinder, Homiee, Upswing, Byju's, Buddy School, etc. Your notes, textbook, homeworks, and a calculator will all be available to you during exams. You will have 3 attempts at each exam with the highest grade counting. Each of the five exams is worth 16% of your grade. If advantageous to your grade, Exam 5 will replace your lowest of Exams 1,2,3 and 4.

**Due Dates and Late Work**

- All exam section assignments will be due **ON THE DAY OF THE EXAM AT MIDNIGHT CENTRAL STANDARD TIME** unless otherwise marked. For example, if the first exam covering chapters 1-3 is marked for Monday August 31st, then all
homework for chapters 1-3 as well as the exam must be SUBMITTED by midnight CST on Monday August 31\textsuperscript{st}.

- You will have two to three weeks to complete all work and to take exams. DO NOT wait to the last minute to complete assignments and exams.
- Due date extensions WILL NOT be granted based on technical issues, health, or personal events.
- Late work WILL NOT be accepted. Once an exam section deadline is past, there are no make-ups or late work. Be sure to complete your work on time.
## Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Chapter and Sections</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-Aug</td>
<td>1: Introduction: The Nature of Science and Physics</td>
<td>4,10,15</td>
</tr>
<tr>
<td>19-Aug</td>
<td>2: Kinematics §1-4</td>
<td>1,14</td>
</tr>
<tr>
<td>21-Aug</td>
<td>2: Kinematics §5-8</td>
<td>26,32,47,59</td>
</tr>
<tr>
<td>24-Aug</td>
<td>3: Two-Dimensional Kinematics §1-3</td>
<td>7,13</td>
</tr>
<tr>
<td>26-Aug</td>
<td>3: Two-Dimensional Kinematics §4-5</td>
<td>30,46,54</td>
</tr>
<tr>
<td>28-Aug</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>31-Aug</td>
<td><strong>Exam 1</strong></td>
<td></td>
</tr>
<tr>
<td>2-Sep</td>
<td>4: Dynamics: Force and Newton's Laws of Motion §1-4</td>
<td>1,7,13</td>
</tr>
<tr>
<td>4-Sep</td>
<td>4: Dynamics: Force and Newton's Laws of Motion §5-8</td>
<td>25,33,46</td>
</tr>
<tr>
<td>7-Sep</td>
<td>Labor Day Holiday</td>
<td></td>
</tr>
<tr>
<td>9-Sep</td>
<td>5: Applying Newton’s Laws: Friction, Drag, and Elasticity §1-3</td>
<td>14,29</td>
</tr>
<tr>
<td>11-Sep</td>
<td>6: Uniform Circular Motion and Gravitation §1-3</td>
<td>7,18,26</td>
</tr>
<tr>
<td>14-Sep</td>
<td>6: Uniform Circular Motion and Gravitation §4-6</td>
<td>39,45</td>
</tr>
<tr>
<td>16-Sep</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>18-Sep</td>
<td><strong>Exam 2</strong></td>
<td></td>
</tr>
<tr>
<td>21-Sep</td>
<td>7: Work, Energy, and Energy Resources §1-2</td>
<td>7,13</td>
</tr>
<tr>
<td>23-Sep</td>
<td>7: Work, Energy, and Energy Resources §3-6</td>
<td>16</td>
</tr>
<tr>
<td>25-Sep</td>
<td>7: Work, Energy, and Energy Resources §7-9</td>
<td>36,42,52</td>
</tr>
<tr>
<td>28-Sep</td>
<td>8: Linear Momentum and Collisions §1-3</td>
<td>1,9,23</td>
</tr>
<tr>
<td>30-Sep</td>
<td>9: Statics and Torque §1-3</td>
<td>1,6</td>
</tr>
<tr>
<td>2-Oct</td>
<td>9: Statics and Torque §4-6</td>
<td>32</td>
</tr>
<tr>
<td>5-Oct</td>
<td>10: Rotational Motion and Angular Momentum §1-3</td>
<td>1,3,16</td>
</tr>
<tr>
<td>7-Oct</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>9-Oct</td>
<td><strong>Exam 3</strong></td>
<td></td>
</tr>
<tr>
<td>12-Oct</td>
<td>11: Fluid Statics §1-5</td>
<td>1,12,18,27</td>
</tr>
<tr>
<td>14-Oct</td>
<td>11: Fluid Statics §6-9</td>
<td>40,59,75</td>
</tr>
<tr>
<td>16-Oct</td>
<td>12: Fluid Dynamics and Biological and Medical Applications §1-3,§7</td>
<td>1,21,27,66</td>
</tr>
<tr>
<td>19-Oct</td>
<td>16: Oscillatory Motion and Waves §1-4</td>
<td>5,7,15,24</td>
</tr>
<tr>
<td>21-Oct</td>
<td>16: Oscillatory Motion and Waves §5-8</td>
<td>36,37</td>
</tr>
<tr>
<td>23-Oct</td>
<td>16: Oscillatory Motion and Waves §9-11</td>
<td>50,62,71</td>
</tr>
<tr>
<td>26-Oct</td>
<td>17: Physics of Hearing §1-4</td>
<td>7,13,33</td>
</tr>
<tr>
<td>28-Oct</td>
<td>17: Physics of Hearing §5-7</td>
<td>51,57,77</td>
</tr>
<tr>
<td>30-Oct</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>2-Nov</td>
<td><strong>Exam 4</strong></td>
<td></td>
</tr>
<tr>
<td>4-Nov</td>
<td>13: Temperature, Kinetic Theory, and the Gas Laws §1-3</td>
<td>1,15,33</td>
</tr>
<tr>
<td>6-Nov</td>
<td>13: Temperature, Kinetic Theory, and the Gas Laws §4-6</td>
<td>44,62</td>
</tr>
<tr>
<td>9-Nov</td>
<td>14: Heat and Heat Transfer Methods §1-3</td>
<td>9,12,25</td>
</tr>
<tr>
<td>11-Nov</td>
<td>14: Heat and Heat Transfer Methods §4-7</td>
<td>38,50,58</td>
</tr>
<tr>
<td>13-Nov</td>
<td>15: Thermodynamics §1-4</td>
<td>7,11,21</td>
</tr>
<tr>
<td>16-Nov</td>
<td>15: Thermodynamics §5-7</td>
<td>42,47</td>
</tr>
<tr>
<td>18-Nov</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>23-Nov</td>
<td><strong>Exam 5, Monday</strong></td>
<td></td>
</tr>
</tbody>
</table>
All Chapter and HW Problems and Exercises are found in Openstax College Physics. Solutions to all HW Problems and Exercises can be found in the Openstax Website.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook¹
- Angelo State University Catalog²

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.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 Procedures\textsuperscript{6} for more information.

Masks and Facial Coverings

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy\textsuperscript{6} to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Plagiarism

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy\textsuperscript{2} 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\textsuperscript{8}.

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\textsuperscript{9} for more information.

Title IX at Angelo State University

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.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)
Face to face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: [michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

Note, 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), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (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).

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1 [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
2 [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
3 [https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php](https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php)
4 [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/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)
6 [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
7 [https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php](https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php)
8 [https://www.angelo.edu/dept/writing_center/academic_honesty.php](https://www.angelo.edu/dept/writing_center/academic_honesty.php)
9 [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)