PHYS 2126, Spring 2020
Fundamentals of Physics II LAB

Section 01z, HOLIK: M 2:00pm – 4:50pm, VIN 160
Section 02z, ALLEN: W 2:00pm – 4:50pm, VIN 160

Instructor: Dr. Eddie ‘Trey’ Holik III
Email: eddie.holik@angelo.edu
Phone: 325-942-5452
Office: VIN 121
Office Hours: TR 9a – 9:30a & 11a – 12p, MWF 9a – 10a, and by appt.

Instructor: Dr. Charles C. Allen
Email: charles.allen@angelo.edu
Phone: 325-942-6780
Office: VIN 128

Course Information

Required Texts and Materials
PHYS 2126 Laboratory Manual, 2019 ed. and a scientific calculator.

Course Description
Laboratory experiences designed to accompany Physics 2326. Emphasis is placed on experiments using the fundamental concepts of electricity, magnetism, and optics.

Prerequisite and Co-requisite Courses
Concurrent enrollment in, or credit for, Physics 2326 and Mathematics 2414 is required.

Student Learning Outcomes
Upon completion of Physics 2126, students will have an increased understanding of the fundamental concepts, theories and physical laws relevant to the broad topical areas of electricity, magnetism, circuits, and optics. Students will have practiced and demonstrated a satisfactory level of mastery in critical reading, critical thinking, and problem solving skills. Students will have engaged in quantitative laboratory experimentation; practiced sound scientific laboratory methods; and utilized a variety of different laboratory measurement techniques, general laboratory skills, data analysis procedures, and error
propagation techniques. Students will also develop and improve technical communication skills required for scientific reporting. These outcomes will be assessed using laboratory report grades.

**Policies**
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 laboratories is not allowed. Prelab assignments are due at the beginning of lab meetings; no late prelabs will be accepted. Students must turn in their own prelabs. Laboratory groups consisting of 2 or 3 people will also turn in group laboratory reports.

**Course Schedule**

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Lab Schedule</th>
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<tbody>
<tr>
<td>13-Jan</td>
<td>No Laboratory Meeting</td>
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<tr>
<td>20-Jan</td>
<td>No Laboratory Meeting</td>
</tr>
<tr>
<td>27-Jan</td>
<td>Introduction to Lab Reports</td>
</tr>
<tr>
<td>3-Feb</td>
<td>Refraction and Snell's Law</td>
</tr>
<tr>
<td>10-Feb</td>
<td>Thin Lenses</td>
</tr>
<tr>
<td>17-Feb</td>
<td>Equipotentials and Electric Fields</td>
</tr>
<tr>
<td>24-Feb</td>
<td>Ohm's Law and Resistivity</td>
</tr>
<tr>
<td>2-Mar</td>
<td>RC Time Constant</td>
</tr>
<tr>
<td>9-Mar</td>
<td>Spring Break</td>
</tr>
<tr>
<td>16-Mar</td>
<td>No Laboratory Meeting</td>
</tr>
<tr>
<td>23-Mar</td>
<td>Kirchhoff's Rules</td>
</tr>
<tr>
<td>30-Mar</td>
<td>The Magnetic Field of the Earth</td>
</tr>
<tr>
<td>6-Apr</td>
<td>The Magnetic Field of a Long Straight Wire</td>
</tr>
<tr>
<td>13-Apr</td>
<td>RLC Resonance</td>
</tr>
<tr>
<td>20-Apr</td>
<td>Laboratory Practicum (20% of grade)</td>
</tr>
<tr>
<td>27-Apr</td>
<td>No Laboratory Meeting</td>
</tr>
<tr>
<td>4-May</td>
<td>No Laboratory Meeting</td>
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</tbody>
</table>
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>
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</thead>
<tbody>
<tr>
<td>Laboratory Grade Average</td>
<td>80%</td>
</tr>
<tr>
<td>Laboratory Practicum</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
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Grading will traditionally be determined as >90 = A, >80 = B, >70 = C, >60 = D, <59 = F.

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:

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 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 at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

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 about Title IX in general you may visit www.angelo.edu/title-ix.

1 https://www.angelo.edu/student-handbook/
2 https://www.angelo.edu/catalogs/
3 https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
4 https://www.angelo.edu/services/disability-services/
5 https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
6 https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
7 https://www.angelo.edu/dept/writing_center/academic_honesty.php
8 https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of