Instructor: Eddie Frank ‘Trey’ Holik III  
Email: eddie.holik@angelo.edu  
Phone: 325-486-5452  
Office: VIN 121  

Office Hours: MTWRF 9:45a-11a  

Course Information  

Course Description  
An introduction to specific mathematical topics as applied to standard problems in physics and engineering.  

Prerequisite Course  
Mathematics 2414 (Calculus II)  

Prerequisite Skills  
Professional standards apply in this class. You are expected to demonstrate a behavior consistent with the conduct of an individual working in a professional environment. You are expected to:  
1. Respect faculty and peers  
2. Demonstrate responsibility and accountability for your own actions  
3. Demonstrate sensitivity and appreciation for diverse cultures, backgrounds, and life experiences  
4. Offer and accept constructive criticism in a productive manner  
5. Demonstrate an attitude that fosters professional behavior among peers and faculty  
6. Maintain a good work ethic and integrity.  

Student Learning Outcomes  
Upon completion of Physics 3301, you should be able to:  
1. Solve quantitative problems relevant to the study of physics and engineering.
2. Evaluate quantitative information appropriate for the study of physics and engineering.
3. Demonstrate a satisfactory level of mathematical reasoning needed for studies in advanced physics and engineering.
4. Demonstrate a depth of analytical thinking appropriate for studies in advanced physics and engineering.

Course Delivery
This is an online course with online components that students are expected to access in Blackboard.¹

Required Texts and Materials
"Mathematical Methods in the Physical Sciences” 3rd edition by Mary Boas. An Integral Table (CRC, Dwight’s, Schaum’s, etc…) is strongly recommended but not required.

Technology Requirements
To successfully complete this course, students need to have access to a smart phone with camera, a printer/scanner, 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.

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>Homework</td>
<td>50%</td>
</tr>
<tr>
<td>Midterm Exams (8% each)</td>
<td>32%</td>
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<tr>
<td>Final Exam</td>
<td>18%</td>
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<tr>
<td>Total</td>
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</table>

Grading System
Course grades will depend on completing course requirements and meeting the student learning outcomes.

The instructor will determine letter grades for the course using his professional judgment, and the following standards as described in the University Catalog:

- A = excellent work 90.00-100 points
- B = good work 80.00-89.99 points
- C = average work 70.00-79.99 points
- D = poor work 60.00-69.99 points
- F = failing work 0-59.99 points (Grades are not rounded up)

The instructor reserves the right to adjust these ranges.

Assignment and Exam Descriptions
Homework
- Homework is due on the assigned date BEFORE MIDNIGHT CST. Late HW will lose 50% credit. HW will not be accepted after the associated exam.
- You should have no more than 2 problems per page. One per page is better. Points deducted otherwise.
• All problems should be submitted in order of assigned. Points deducted otherwise.
• You are required to rewrite the problem statement in your own words. Use pictures if necessary. Points deducted otherwise.
• Show all work and do not skip steps. Use words to explain your solution. Points deducted otherwise.
• Only blue or black ink or dark pencil is acceptable. Points deducted otherwise.
• Submitting HW in word or LaTeX is acceptable.
• Submitted HW must be without fray or fringe and on white paper. The scanned submission of your HW must be clear, centered, and without parallax error. The scan must be in color. Points deducted otherwise.
• HW submissions will only be accepted through Bb. Feel free to email HW to me, but it will not be worth any credit.

Exams
• Exam submission format is same as for HW. Note the ‘Points deducted otherwise’ statements.
• An exam coversheet with all questions will be provided and is a required component of your submitted exam. Points deducted otherwise.
• Late submissions will NOT be accepted. Plan accordingly.
• Make-up quizzes/exams are NOT allowed. The only exceptions granted are for university-excused absences and religious holidays in which I am notified in advance in writing.

Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Suggested Date</th>
<th>Boas Sections (Chapter:Section)</th>
<th>Boas Problems (Chapter:Section:Problem)</th>
<th>Due Date</th>
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<td>15-Sep</td>
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**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.4

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.5 The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. 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 Procedures6 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

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 Miller, J.D. You may submit reports in the following manner:

Online: Incident Reporting Form
Face to Face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: michelle.miller@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 the Title IX website.\textsuperscript{11}

**Information About COVID-19**

Please refer to ASU’s COVID-19 (Coronavirus) Updates\textsuperscript{12} web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

**Modifications to the Syllabus**

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

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1. https://blackboard.angelo.edu/
3. https://www.angelo.edu/academics/catalog/
5. https://www.angelo.edu/current-students/disability-services/
6. https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
9. https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of
10. https://www.angelo.edu/incident-form
11. https://www.angelo.edu/title-ix
12. https://www.angelo.edu/covid-19/