Math 3333: Calculus III
Course Syllabus

Disclaimer: This syllabus is current and accurate as of its posting date, but will not be updated. For the most complete and up-to-date course information, contact the instructor.

Instructor: Dr. Dennis Hall
Office Hours: M 9:50–12:00
eT 10:45–12:30
W 9:50–12:00
Th 10:45–12:30
F 9:50–11:00 & 12:00–1:00

Office: MCS 220H
E-mail: dennis.hall@angelo.edu
Phone: 325-486-5426

Course Description: Multivariate calculus and applications; partial differentiation, multiple integrals, infinite series, and approximation techniques.


Evaluation: Your grade for this course will be determined by your performance on tests, quizzes, and a final exam. Final grades will be based on a standard 10-point grading scale.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Final Exam</td>
<td>30%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Four Tests</td>
<td>60%</td>
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Exams: There will be 4 in-class tests during the semester and a comprehensive final exam. Each test will count 15% of your final grade, and the final exam will count 30%. There are no make-ups for tests. If you miss up to one test for any reason, that test grade will be replaced by your final exam grade. You will receive a grade of zero for any test missed after the first.

Homework: Homework will be assigned periodically throughout the semester. Grades received on homework will count toward bonus points on the tests. It is encouraged that homework be worked on together in groups, or with tutors.

Quizzes: Quizzes will be given regularly throughout the semester, and usually worked in class. You will be notified of all quizzes by at least the class period before the quiz is to take place. Any quizzes assigned for work in class are to be completed individually.
Course Content: The following chapters and content will be covered.

8. Infinite Series: Sequences and series, integral test and p-series, comparison tests, alternating series, ratio and root tests, power series, Taylor and Maclaurin series, approximations using power series.

10. Vectors and the Geometry of Space: Space coordinates, vectors in the plane and space, dot product, cross product, equations of lines and planes, quadric surfaces.


12. Multiple Integrals: Double integrals over rectangular and nonrectangular regions, double integrals using polar coordinates, triple integrals, change of variables.

Student Disability Services:

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.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu

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 via Turnitin. 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. (http://www.angelo.edu/opmanual/ – OP 10.19)
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.

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 Statement of Academic Integrity.

Copyright Policy:

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Title IX:

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU’s Title IX Coordinator:

Michelle Boone
Director of Title IX Compliance
325-486-6357
michelle.boone@angelo.edu

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
Course Schedule: What follows is a tentative schedule, and is likely to change throughout the semester.

- Week 1: Three-dimensional coordinate systems, vectors, and the dot product.
- Week 2: The cross product, and equations of lines and planes.
- Week 3: Cylinders and quadric surfaces, and review.
- Week 4: Test 1 (Chapter 10)
- Week 5: Functions of several variables, limits, continuity, and partial derivatives.
- Week 6: Tangent planes, the chain rule, and directional derivatives.
- Week 7: The gradient vector, maximum and minimum values, and review.
- Week 8: Test 2 (Chapter 11)
- Week 9: Spring Break
- Week 10: Double integrals over regular and general regions.
- Week 11: Triple integrals, change of variables in multiple integrals, and review.
- Week 12: Test 3 (Chapter 12)
- Week 13: Sequences, series, and integral test.
- Week 14: Comparison test, other convergence tests, power series, and review.
- Week 15: Test 4 (Chapter 8)
- Week 16: Taylor series, Maclaurin series, and review.
- Week 17: Final Exam (Cumulative) on May 10, 8–10AM.