

MATH 3333: Calculus III, Fall 2019

Contact Information

Instructor: Karl Havlak
Office: MCS 220A
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Office Hours:

8:55 – 9:55 a.m., 1:00 – 2:00 p.m., MWF;
8:00 - 9:00 a.m., W;
9:30 – 11:00 a.m., TR
or by appointment

Textbook

Essential Calculus: Early Transcendentals (Second Edition) by James Stewart.

Blackboard

This course has an associated [Blackboard page](#)ⁱ where you will have access to grades, assignments, videos, handouts, and other course-related items.

Course Content

Selected sections from Chapters 8, 10, 11, and 12 will be studied.

Grading System

The final average will be determined according to the weights in the table that follows.

Activity	Date	Weight
Exam I	September 20 (Fri)	10-20%
Exam II	October 11 (Fri)	10-20%
Exam III	November 1 (Fri)	10-20%
Exam IV	November 25 (Mon)	10-20%
Final Exam	December 9 (Mon)	20%
Homework	Most Days	15%

Grading Policy

To determine the average needed to ensure that you obtain the grade that you want in this course, consult the table that follows.

Average	Grade
89.5 and above	A
79.5 to 89.5	B
69.5 to 79.5	C
59.5 to 69.5	D
below 59.5	F

Homework Policy

Homework sets will be assigned most days and will be due at the beginning of the next class day unless there is an exam on that day. In that case, the homework will be due the day

following the exam. The lowest 3 homework grades will be dropped at the end of the semester when determining the homework average. I will accept up to 2 late assignments during the semester. No other late assignments will be accepted for any reason. If you have trouble completing a homework assignment, please see me for assistance.

Exams

There will be four mid-semester exams scheduled as shown above, which will account for 65% of your final grade. The two highest of these exams will each account for 20% of your final grade, the lowest of these exams will account for 10% of your final grade, and the remaining exam will account for 15% of your final grade. In addition to these exams, there will be a *comprehensive* Final Exam on Monday, December 9, 10:30 a.m. – 12:30 p.m. The Final Exam will account for 20% of your grade.

Attendance

Attendance will be taken regularly. Please inform me of any absences prior to the absence whenever possible.

Student Responsibilities

The student is *solely* responsible for:

- Completing each assignment by the specified due date.
- Obtaining assignments and other materials for classes from which they are absent.
- Utilizing, as needed, all available study-aid options (including meeting with the instructor, referring to outside texts, etc.) to resolve any questions that they might have regarding homework, course material, etc.
- Realizing from the beginning of the course the grade that they may need or want to graduate, maintain a scholarship, stay in athletics, etc. ... and give as much effort as it takes to obtain this grade.

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.

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](#)ⁱⁱ. 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

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: [Title IX Incident Form](#)ⁱⁱⁱ

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

E-Mail: 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 the [ASU Title IX website](#)^{iv}.

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. The full details can be found in ASU Operating Policy OP 10.19 [Observance of Religious Holy Days](#)^v.

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](#)^{vi} for more information.

Student Conduct Policies

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](#)^{vii}

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](#)^{viii}.

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.

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](#)^{ix}
 - [Angelo State University Catalog](#)^x
- In the event that the university is closed for a scheduled class time, whatever was scheduled for that day and/or whatever was due that day will be scheduled and/or due on the next scheduled class time.
- All electronic correspondence will be sent to your ASU e-mail account unless other arrangements are made.
- Feel free to come by my office at any time for help. I will definitely be near my office during my office hours (or there will be a note telling you when I will be back). If my office hours are not convenient for you, meet with me to arrange for another time that is more convenient.
- Good luck. I sincerely hope you do well in this course, and I strongly encourage you to use me as a resource outside of class to help you succeed.

All items contained in this syllabus are subject to change as the semester progresses. Students will be notified in advance of any changes.

Mathematics 3333 – Calculus III Student Learning Outcomes

1. **Students will demonstrate factual knowledge of the mathematical notation and terminology used in this course.** Students will demonstrate the ability to read, interpret, and use the vocabulary and symbolism of vectors, infinite series, and, multivariate calculus.
2. **Students will be able to describe the fundamental principles arising from the concepts in this course.** Students will demonstrate familiarity with the concepts that follow from the definitions; for example, convergence and divergence of infinite series, tangent planes and normal lines to surfaces, integral representations of areas and volumes.
3. **Students will be able to apply the course material to solve problems.** Students will use the facts, formulas, and techniques of calculus III to solve problems pertaining to the core concepts of the course, as well as to other areas of mathematics and various applied areas such as physics, chemistry, and engineering.
4. **Students will develop specific skills, competencies and reasoning abilities to support further study or work in this or related fields.** Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic areas requiring calculus III as a prerequisite or for work in fields such as engineering, physics, chemistry and statistics.

Course Content

Content consists of the following topics, listed according to the corresponding chapters in the text. (See textbook “Contents.”)

- Chapter 8 – 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.
- Chapter 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.
- Chapter 11 – Partial Derivatives:** Properties of functions of several variables, limits and continuity, partial derivatives, tangent planes, chain rule, directional derivatives, gradients, tangent planes, extrema.
- Chapter 12 – Multiple Integrals:** Double integrals over rectangles, general regions, and polar regions, triple integrals, change of variables

Anticipated Daily Schedule

The table below estimates the section that will be discussed on the date listed. Specific sections along with any handouts for those sections will be updated throughout the semester in Blackboard.

Day	Activity
August 26	10.1, 10.6
August 28	10.6
August 30	10.2
September 2	Holiday
September 4	10.2, 10.3
September 6	10.3, 10.4
September 9	10.4, 10.5
September 11	10.5
September 13	10.7
September 16	10.7, 11.1
September 18	11.1
September 20	Exam 1
September 23	11.2
September 25	11.2, 11.3
September 27	11.3, 11.4
September 30	11.5
October 2	11.6
October 4	11.6
October 7	11.7
October 9	11.7
October 11	Exam 2
October 14	11.7
October 16	12.1
October 18	12.2
October 21	12.2, 12.3
October 23	12.3, 12.8
October 25	12.8
October 28	12.5
October 30	12.5, 6.6
November 1	Exam 3
November 4	8.1
November 6	8.2
November 8	8.2, 8.3
November 11	8.3
November 13	8.3, 8.4
November 15	8.4
November 18	8.4, 8.5
November 20	8.5
November 22	8.6
November 25	Exam 4
November 27	Holiday
November 29	Holiday
December 2	8.6
December 4	8.7
December 6	8.7
December 9	Final Exam 10:30 a.m. – 12:30 p.m.

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- i Blackboard Link: <http://blackboard.angelo.edu>
 - ii Student Disability Services Link: www.angelo.edu/ADA
 - iii Title IX Incident Form: <http://www.angelo.edu/incident-form>
 - iv ASU Title IX Website: <http://www.angelo.edu/title-ix>
 - v Observance of Religious Holy Days: <http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>
 - vi Grading Procedures: <http://www.angelo.edu/content/files/14197-op-1011-grading-procedures>
 - vii Academic Integrity: <http://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>
 - viii ASU Writing Center: http://www.angelo.edu/dept/writing_center/academic_honesty.php
 - ix Student Handbook: <http://www.angelo.edu/student-handbook/>
 - x University Catalog: <http://www.angelo.edu/catalogs/>