Calculus 2

Spring 2020

Course no. 2414.020
Instructor Trey Smith
Time MWF: 9:00-9:50, R: 8:00-8:50
Location MCS 216
Office MCS 219A
Hours MTWR : 10:00-11:00, 2:00-3:00
Others by Appointment
Phone (325) 486-5441
Email trey.smith@angelo.edu
Fax (325) 942.2503

Grading
This is a Standards Based Course; you will need to demonstrate mastery of twelve different standards in order to be successful. Associated to each standard will be a packet. This packet will include homework problems and video responses that will be submitted through Gradescope. For each packet you will either receive a P for passing or an F for, well, not passing. If you do not complete the packet on time, you will automatically receive an F. Incidentally, the packets will be available to even after the due date, but you will not be able to obtain a P on that packet after the date.

Also, for each standard you will also be given a quiz. There are three possible quiz grades: you could receive a P for passing the quiz on the designated quiz date, a P- for passing the quiz on a later date, or an F for never passing that quiz. You may attempt a quiz as many times as you like (time permitting), but after the quiz date, the best you can hope for is a P-. Note: you may only take one quiz per day and the only quiz you may take on a quiz day is the designated quiz for that day.

So, you will have twelve different standards grades. A standards grade is determined as follows:

- 100% for a packet P and a quiz P.
- 90% for a packet F and a quiz P.
- 80% for a packet P and a quiz P-.
- 70% for a packet F and a quiz P-.
- 0% for a quiz F.

So, realistically, you could get an A in the course if you never did a packet and passed all of the quizzes on the designated quiz date.
You could also get a C if you never did a packet and passed all the quizzes in the last three weeks of class; I would not recommend this approach.

The final exam will affect your grade in the following way: if you score less than 60% on the final, your quiz average will be reduced by a letter grade. If you score a 90% or above on the final, your grade will improve by a letter grade.

**Homework**
The homework will consist of the packets. Pay close attention to due dates.

**Attendance**
I will be taking attendance every class. If you are in class, you will receive credit for that day. If you stream the lecture live or watch the lecture at a later time, you will need to fill out an “attendance questionnaire” in order to receive credit. The attendance counts as 10% of the standard packet.

**Office Hours**
I will be hosting virtual office hours on collaborate daily. I will be available from 10:00-11:00 and 2:00-3:00 every day. Other meetings may be set up by appointment.

**Calculators**
Calculators will generally not be allowed during exams.

**Course Outline**
The following is a tentative outline of the material to be covered. I have included the designated test date for each topic. All designated tests are scheduled for Thursday at 8:00 AM. All packets are due by 8:00 AM on the designated test day. *I reserve the right to change the material and/or sequence.*

**Topics by Week**

1) Calculus 1 Review:
2) Calculus 1 Review Q1 - 8.27
3) Substitution Q2 – 9.3
4) Trigonometric Integrals Q3 – 9.10
5) Integration by Parts Q4 – 9.17
6) Trigonometric Substitutions Q5 – 9.24
7) Partial Fraction Decomposition Q6 – 10.1
8) Approximation and Improper Integrals Q7 – 10.8
9) Applications (Area and Volume) Q8 – 10.15
10) Applications (Physics) Q9 – 10.22
11) Sequences and Series
12) Sequences and Series Q10 – 11.5
13) Power Series Q11 – 11.12
14) Parametric Equations and Polar Q12 – 11.19
Student Learning Outcomes

1. The students will demonstrate factual knowledge including the mathematical notation and terminology used in this course. Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in Calculus II as they pertain to integrals, parametric equations, series, and polar coordinates.

2. The students will describe the fundamental principles including the laws and theorems arising from the concepts covered in this course. Students will identify and apply the laws and formulas that result directly from the definitions; for example, integral formulas and integration techniques, and applying calculus operations to parametric and polar equations.

3. The students will apply course material along with techniques and procedures covered in this course to solve problems. Students will use the facts, formulas, and techniques learned in this course to calculate areas, volumes, and surface areas; to find lengths of curves; to determine series convergence; to analyze problems in physics.

4. The students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field 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 II as a prerequisite, or for work in occupational fields requiring a background in Calculus II. These fields might include computer science, engineering, the physical and natural sciences as well as mathematics.

Textbook:

*Essential Calculus: Early Transcendentals, 2nd ed.* by James Stewart. Chapters 6, 7, 8, and 9 are covered (see the outline above).
More Course Information.

Course Delivery
To maintain academic quality while accommodating social distancing needs this semester, this course will combine 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 may 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 attend live remote sessions at the same time as our scheduled course. You will also be expected to complete coursework via Blackboard.¹

Please refer to this Health and Safety web page² for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Communication
I will do my best to 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. 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, or Zoom.
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 to 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
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.11

Required Use of Masks/Facial Coverings by Students
As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy12 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.

Modifications to the Syllabus
This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

1 https://blackboard.angelo.edu/
2 https://www.angelo.edu/covid-19/returning-to-campus/health-and-safety.php
3 https://www.angelo.edu/student-handbook/