

# MATH 1332

## An Introduction to Contemporary Mathematics

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Phone: (325)486-5439

Office: MCS 220H

**Office Hours: Will be held by appointment and can be done in person or virtually. Instructions for setting up appointments through Navigate will be provided.**

### Teaching Philosophy

I believe that all students can learn mathematics given appropriate instruction and by appropriate practice. I understand that each student is unique and possess a variety of experiences which they can bring to bear on their learning and interactions with classmates. I recognize that all individuals have a right to mutual respect and to be accepted by others without biases based on differences of any kind.

## Course Information

### Course Description

A survey of ideas in contemporary mathematics. Topics may include graphs and networks, theory of elections and apportionment, statistics, and mathematical models. Recommended for students who wish to satisfy their core mathematics requirement but do not plan to take additional mathematics coursework.

### Prerequisite and Co-requisite Courses

Completion of Mathematics Texas Success Initiative (TSI) requirements.

### Prerequisite Skills

Accessing Internet websites and proficiency with a scientific calculator are expectations of this course.

## Student Learning Outcomes

Upon completion of this course, students will be able to:

- **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 a selection from the following topics: basic algebraic techniques, voting theory, apportionment, the mathematics of money, probability, statistics, graph theory, and geometry.
- **The students will be able to describe generalizations of mathematics to real-world situations.** Students will be able to describe, for example, the role played by mathematics in the theory of voting. The students will be able to describe connections between mathematical concepts and natural and societal phenomena.
- **The students will apply the course material along with techniques and procedures covered in this course to solve various problems and improve decision making.** The students will apply such topics related to statistics and probability to improve decision making through a broader understanding of mathematics. They will learn to analyze problems using mathematical ideas and symbolism and learn to obtain the appropriate resources required to better deal with such problems.
- **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 develop new approaches and algorithms for solving problems related to networking, scheduling and paths. Students will develop basic algebraic skills necessary for the support of their academic careers.

## Course Delivery

This course will meet daily in person. Instruction and activities will be accomplished during these class meetings. Students are expected to attend class in person each day.

## Required Texts and Materials

All texts and materials will be provided in class or through Blackboard. Student should incur no expense unless they have utilized all their print credits.

## Technology Requirements

To successfully complete this course, student needs to have regular and reliable access to a computer and printer. Please note that tablets and phones will not always support the online tools utilized in this course. A reliable internet connection is also required. Further, student will need to have access to a scanner or a scanner application for turning in pencil/paper assignments. A scientific or graphing calculator will be allowed on assessments. If you are planning to use campus owned technology, get a copy of

the hours of operation for the various locations and set your study schedule accordingly. For technology assistance, contact the IT Service Center, which is located in MCS 111. Their phone number is (325) 942-2911 or check out their web page at <https://www.angelo.edu/services/technology/support/> .

## 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. 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 will be done with the assistance of Collaborate, and scheduled through Navigate.

## Grading

### Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Assignments	20
Test 1	20
Test 2	20
Test 3	20
Test 4 (Final Exam)	20
Total	100%

### Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

- A = 89.5 -100 points
- B = 79.5 – 89.5 points
- C = 69.5 – 79.5 points
- D = 59.5 – 69.5 points
- F = 0-59.4 points

## Assignment and Activity Descriptions

### Assignment and Homework Policy

- Assignments will be accessed through Blackboard. Student will be expected to print out files as assigned.
- Due dates will be shown in course calendar in Blackboard. Any student who is having trouble meeting set deadline must contact the instructor before the assignment is due during regular business hours.
- Pencil and paper assignments will be submitted through Gradescope.
- At the end of the semester, the three lowest assignment/homework scores will be dropped.

### Assessments

- We will have three regular tests and a non-comprehensive final exam. A calculator is allowed for each assessment.
- If you miss an exam, you need to get in touch with me immediately! You may be required to take a comprehensive final exam to compensate for the missing exam. If you know prior to the test that you will be absent, let me know and we can make arrangements.

### Final Exam

The final exam for this course will be non-comprehensive. The final exam for this course is scheduled for August 13 at 12:00 PM.

## 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](#)<sup>1</sup>
- [Angelo State University Catalog](#)<sup>2</sup>

### 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](#).<sup>3</sup>

## **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](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#).<sup>4</sup> 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](mailto: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](#)<sup>5</sup> for more information.

## **Plagiarism**

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)<sup>6</sup> 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](#).<sup>7</sup>

## **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](#)<sup>8</sup> 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 Miller, J.D.  
Special Assistant to the President and Title IX Coordinator  
Mayer Administration Building, Room 210  
325-486-6357  
[michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

**You may also [file a report online](#)<sup>9</sup> 24/7.**

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, visit the [Title IX website](#).<sup>10</sup>

# 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.

## Course Schedule

<b>Date</b>	<b>Topic or Module</b>	<b>Activities</b>
7/12	Module 1	Syllabus, Basic Elements of an Election,
7/13	Module 1	Preference Schedules, Voting Methods
7/14	Module 2	Weighted Voting and Banzoff Power Distribution
7/15	Module 3	Fair Division and Sealed Bid Method
7/16	Module 4	Apportionment and Hamilton Method
7/19	Mod 1 -4	Review
7/20	Mod 1-4	Test 1
7/21	Module 5	5.1 and 5.2
7/22	Module 5	5.3 and 5.4
7/23	Module 6	6.1 and 6.2
7/26	Module 6	6.3 and 6.4
7/27	Module 7	7.1 and 7.2
7/28	Mod 5-7	Review
7/29	Mod 5-7	Test 2
7/30	Module 8	8.1 and 8.2
8/2	Module 8	8.3 and 8.4
8/3	Module 9	9.1 and 9.2
8/4	Module 9	9.3 and 9.4
8/5	Module 9	9.5 and Review
8/6	Mod 8-9	Test 3
8/9	Module 10	10.1 and 10.2
8/10	Module 10	10.3 and 10.4
8/11	Mod 11	11.1
8/12	Mod 10-11	Review
8/13	Final Exam	Non-comprehensive final at 12:00 PM. Modules 10 and 11

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<sup>1</sup> <https://www.angelo.edu/current-students/student-handbook/>

<sup>2</sup> <https://www.angelo.edu/academics/catalog/>

<sup>3</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

<sup>4</sup> <https://www.angelo.edu/current-students/disability-services/>

<sup>5</sup> <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

<sup>6</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

<sup>7</sup> [https://www.angelo.edu/current-students/writing-center/academic\\_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)

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- <sup>8</sup> <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>
- <sup>9</sup> <http://www.angelo.edu/incident-form>
- <sup>10</sup> <https://www.angelo.edu/title-ix>