

MATH 1324

Finite Mathematics



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Office: MCS 205H

Office Hours:

<i>Day</i>	<i>Time</i>
<u>Monday</u>	11:00 AM-1:30PM
<u>Tuesday</u>	12:30PM-2:30PM
<u>Wednesday</u>	11:00 AM-1:30PM
<u>Thursday</u>	12:30PM-2:30PM
<u>Friday</u>	11:00 AM-12:00PM

Course Information

Course Description

Topics include basic algebra, linear equations, quadratic equations, functions and graphs, inequalities, logarithms and exponential functions, mathematics of finance, linear programming, matrices, systems of linear equations, and applications to management, economics, and business.

Student Learning Outcomes

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

- **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 Finite Mathematics I. Including exponents, factoring, linear and quadratic equations, number systems, functions, polynomials, logarithms, matrices, mathematics of finance, set theory, and basic probability.

- **Students will describe the fundamental principles arising from the mathematical ideas associated to business applications.** Students will identify and apply the laws and formulas that result directly from the definitions; for example, the properties associated with probability models and probability experiments, the properties of exponents, logarithms, equations, and the formulas associated with the mathematics of finance.
- **Students will apply the course material along with techniques and procedures covered in this course to solve business related problems.** Students will use the facts, formulas, and the techniques learned in this course to solve basic business problems. This includes applying probability models to business problems; solving annuity and interest problems; analyzing and interpreting graphs; converting logarithmic equations to exponential equations and vice-versa; using lines and their properties; performing matrix operations; graphing various function types; and employing the use of calculators and/or computers.
- **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 areas requiring Finite Mathematics I as a prerequisite. These areas might include business, marketing, finance, computer science, nursing, and the social sciences, as well as mathematics.

Course Delivery

This is a face-to-face course with online components that students are expected to access in [Blackboard](#).¹

Required Texts and Materials

Finite Mathematics with Business Applications, Libretexts.org. Angelo State University. (2021, May 29). <https://math.libretexts.org/@go/page/65777>

Access to Blackboard is required. All homework, handouts and tests will be administered through Blackboard.

Technology Requirements

To successfully complete this course, students need to have access to a computer to log in to [Blackboard](#). Course videos, notes, homework, quizzes and other assignments will be post in [Blackboard](#).

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.

Grading

Evaluation and Grades

Course grades will be determined as indicated below.

- Homework: Homework will be assigned at the end of every lesson. You are expected to complete all homework problems in Blackboard. Homework will count 20% of your overall grade.
- Tests: Four Tests will be taken during class time. The tests will be administered through Blackboard. These will count 60%
- The final exam will be a proctored test, administered Monday, May 9, 10:30 to 12:30. The final exam will count 20% of your overall grade.
- All grades will be posted in Blackboard as they are graded. Your overall average will be available in the Blackboard grade book. Final grades will be posted in RamPort at the end of the semester.

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 = 90.00-100 points
- B = 80.00-89.99 points
- C = 70.00-79.99 points
- D = 60.00-69.99 points
- F = 0-59.99 points

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](#)²
- [Angelo State University Catalog](#)³

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 Procedures](#)⁶ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)⁷ 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](#).⁸

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](#)⁹ 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](#)¹⁰

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](#).¹¹

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)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.

Course Schedule

Day	Date	Activity	Due
1	19-Jan	Introduction/Real Numbers	
2	21-Jan	Real Numbers	24-Jan
3	24-Jan	Exponents and Scientific Notation	26-Jan
4	26-Jan	Radicals and Rational Exponents	28-Jan
5	28-Jan	Polynomials	31-Jan
6	31-Jan	Factoring	2-Feb
7	2-Feb	Rational Expressions	4-Feb
8	4-Feb	Linear Equations in One Variable	7-Feb
9	7-Feb	The Rectangular Coordinate System	9-Feb
10	9-Feb	Slope and Equations of Lines	11-Feb
11	11-Feb	Models and Applications	14-Feb
12	14-Feb	Quadratic Equations	16-Feb
13	16-Feb	Other Types of Equations	18-Feb
14	18-Feb	Linear Inequalities and Absolute Value Inequalities	21-Feb
15	21-Feb	Review for Exam 1	23-Feb
16	23-Feb	Exam 1	
17	25-Feb	Functions and Function notation/Domain and Range	28-Feb
18	28-Feb	Linear functions	2-Mar
19	2-Mar	Modeling with Linear Functions	4-Mar
20	4-Mar	Quadratic Functions	7-Mar
21	7-Mar	Applications of Quadratic Functions	9-Mar
22	9-Mar	Exponential functions and graphs	11-Mar
23	11-Mar	Logarithmic functions and graphs	21-Mar
	14-Mar	Spring Break	
	16-Mar	Spring Break	
	18-Mar	Spring Break	
24	21-Mar	Properties of logarithms	23-Mar
25	23-Mar	Exponential and Logarithmic Equations	25-Mar
26	25-Mar	Review for Exam 2	28-Mar
27	28-Mar	Exam 2	

28	30-Mar	Simple Interest	1-Apr
29	1-Apr	Compound Interest	4-Apr
30	4-Apr	Annuities and Payout Annuities	6-Apr
31	6-Apr	Loans	8-Apr
32	8-Apr	Review for Exam 3	11-Apr
33	11-Apr	Exam 3	
34	13-Apr	Basics of Sets	18-Apr
35	15-Apr	Good Friday	20-Apr
36	18-Apr	Union Intersection and Complement, and Venn Diagrams	22-Apr
37	20-Apr	Introduction to Probability	25-Apr
38	22-Apr	Inclusion-Exclusion and Independence	27-Apr
39	25-Apr	Conditional Probability	29-Apr
40	27-Apr	Systems of Linear Equations	2-May
41	29-Apr	Matrices and Matrix Operations	2-May
42	2-May	Review Test 4	4-May
43	4-May	Exam 4	
44	6-May	Review Final Exam	
	9-May	Final Exam Monday, May 9 10:30 to 12:30	

¹ <https://blackboard.angelo.edu/>

² <https://www.angelo.edu/current-students/student-handbook/>

³ <https://www.angelo.edu/academics/catalog/>

⁴ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁵ <https://www.angelo.edu/current-students/disability-services/>

⁶ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁷ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁸ https://www.angelo.edu/current-students/writing-center/academic_honesty.php

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/>