MATH 1324-T20
Finite Mathematics

MWF: 10:00am – 10:50am and TR: 9:30am – 10:45am

Instructor: Dr. Simon Pfeil

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Phone: (325) 486-5436
Office: MCS 219C

Office Hours:
 Monday 2:00pm – 3:00pm
 Tuesday 8:30am – 9:30am and 11:00am – 3:00pm
 Wednesday 2:00pm – 3:00 pm
 Thursday 8:30am – 9:30am
 Friday 9:00am – 10:00am and 2:00pm – 3:00pm
   …or by appointment via email.

Course Information

Course Description

This is an introductory college math course, covering a broad range of ideas. Topics include basic algebra, linear equations, quadratic equations, functions and graphs, inequalities, logarithms and exponential functions, mathematics of finance, matrices, systems of linear equations, probability, and applications to management, economics, and business.

Prerequisite and Co-requisite Courses

None.

Prerequisite Skills

The most important prerequisite skills are perseverance and the willingness to seek help when it is needed. Also, some high school algebra, and the ability to navigate Blackboard for information and supplemental materials will be useful.

Student Learning Outcomes

Upon completion of this course:

- **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, 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 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

The text is free and will be made available as a pdf in Blackboard.
College Algebra, by OpenStax [Abramson et al.]
Math in Society, v2.5, by David Lippman et al.

Technology Requirements

To successfully complete this course, students will need to be able to access the online homework and assessment tools embedded in Blackboard. Students must also have access to a webcam and computer microphone to attend online office hours.

Access to exams and quizzes will be through Respondus Lockdown.

If the course transitions to online delivery, Blackboard Collaborate will be used to provide lectures. Interaction with the lecture will require a microphone or webcam.

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 and/or advising may be done with the assistance of the telephone, Collaborate, etc.

Grading

Evaluation and Grades

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

Assessment	Percent of Grade
1: Chapter 1, part 1	8%
2: Chapter 1, part 2	8%
3: Chapter 1, part 3	8%
4: Chapter 2, part 1	8%
5: Chapter 2, part 2	8%
6: Chapter 2, part 3	8%
7: Chapter 3	8%
8: Chapter 4	8%
9: Chapter 7	8%
10: Chapter "Growth Models"	8%
11: Chapter "Finance"	8%
12: Chapter "Sets" and "Probability"	8%
Attendance	3%
Weekly Update	1%
Final Exam	+ or – one letter grade
Total	100%

Grading System

Course grades will depend on completing course requirements and meeting the student learning outcomes.

This course uses the following grading scale:

> 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 (Grades are not rounded up)

Assignment and Activity Descriptions

The course grade will be based on the average of all assessment grades, plus attendance and weekly reflections. Assessments will reflect the homework and will be assigned through Blackboard. Each assessment will be graded for accuracy with no partial credit. Furthermore, any score below 60% on an assessment will be treated as a 0% score for that assessment.

However! Each assessment may be retaken as many times as necessary, at the convenience of the professor. The retake policy for assessments is as follows:

- First attempt: In class, as scheduled.
- Second attempt: <u>Must</u> successfully complete the 80% of the associated homework exercises prior to the second attempt. The exam will be administered during office hours, scheduled with professor via email.
- Third attempt and on: <u>Must</u> meet with professor in office hours to discuss previous attempts. Scheduled with professor during this meeting.

The final score on each assessment will be the score of the last attempt; that is, only the most recent score counts.

Example 1: Student takes Assessment 1 in class and scores 75%. The student's score in the gradebook is 75%. Unsatisfied, the student schedules a retake for Assessment 1. On the retake, the student scores 95%. The student's new score on the assessment is 95%.

Example 2: Student takes Assessment 1 in class and scores 55%. This score counts as 0% in the gradebook. The student schedules a retake and scores a 70%. The student's new score for the assessment is 70%. Wishing to improve their score further, the student meets with the professor, discusses the two previous attempts, and schedules a third attempt. On the third attempt, the student scores a 75%. The student's score on the assessment is 75%.

Example 3: Student takes Assessment 1 and scores 70%. The student schedules a retake and scores 55%. The student's new score for the assessment is 0%.

Final Exam

The final exam will be held in the MCS computer lab on Monday, May 9 from 10:30am – 12:30pm. It is comprehensive. It will impact your grade as follows:

- Score 90% or above: increase your letter grade by one letter.
- Score between 60% and 90%: letter grade stays the same.
- Score below 60%: decrease your letter grade by one letter.

Homework and Practice Exams

Homework and practice exams will be assigned regularly through Blackboard. They are there for your practice and improvement. They will not be counted toward your final grade. They are a prerequisite to retaking assessments.

Attendance and Late Work

Attendance will be taken daily. Please inform me prior to an absence whenever possible. You are permitted three absences without impact to your attendance grade. You may retake assessments up to the first day of final exam week if you have the prerequisite homework completed and schedule a retake with the professor, regardless of the reason why you might need to retake. Homework has no due date.

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] (Page 97).

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 Statement[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

Week. Topic
1. Introduction, Algebra Essentials
2. Exponents
3. Radicals
4. Polynomials
5. Factoring, Rational Expressions
6. Linear Equations, Models
7. Applications
8. Graphs, Quadratic Equations
9. Linear Inequalities, Absolute Value Inequalities
10. Functions, Domain, and Range
11. Linear and Quadratic Functions
12. Exponential Growth
13. Finance
14. Systems of Equations, Matrices
15. Probability
16. Final Exam, Monday, May 9 from 10:30am – 12:30pm.

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[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=97

[5] https://www.angelo.edu/current-students/disability-services/

[6] https://angelo.policystat.com/policy/10659448/latest/

[7] https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97

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

[9] https://angelo.policystat.com/policy/10659368/latest/

[10] https://www.angelo.edu/incident-form

[11] https://www.angelo.edu/title-ix

[12] https://www.angelo.edu/covid-19/