

Math 1324: Finite Math

Course Syllabus



This syllabus is current and accurate as of its posting date, but it will not be updated. For the most complete and up-to-date course information, contact the instructor.

Contact Information

Instructor: Dr. Dennis Hall

Office: MCS 220J

Office Hours: Monday/Wednesday/Friday: 11:50AM – 2:00PM

Tuesday/Thursday: 1:45PM-3:30PM

E-mail: dennis.hall@angelo.edu

Phone: 325-486-5426

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.

Textbook: This course will use the free online textbook “Finite Mathematics with Business Applications” available here: https://math.libretexts.org/Courses/Angelo_State_University

Prerequisite Courses: Completion of Mathematics Texas Success Initiative (TSI) requirements.

Course Delivery: This is a face-to-face course with online components that students are expected to access in Blackboard.

Technology Requirements: This course will be using the free online homework system MyOpenMath. This homework system requires a somewhat modern computer with reliable internet access. The computer lab in MCS is available to students, if needed.

Communication: Most email will receive a response within 24 hours during working hours Monday through Friday. Please include your course name (Calculus III, Finite Math, etc.) in your messages for the quickest reply.

Course Evaluation

Your grade for this course will be determined by your performance on exams and homework. Final grades will *be based on a standard 10-point grading scale*.

Assignments (20%): The assignments category includes both homework and classwork that will be assigned throughout the semester. Homework will be completed online in Blackboard using MyOpenMath. You are welcome to receive help on homework from any source: me, students, solutions manuals, online, etc. However, it is encouraged that you work the homework on your own first, since this will be the best way to practice for tests.

Tests (80%): There will be four tests throughout the semester, and each will count for 20% of your final grade. These tests will be given in-person on paper. You may use only a scientific calculator and no notes or books are allowed, except when specified by the professor.

Final Exam: The final exam is optional and counts only to replace your lowest test grade, if needed.

Other Information

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)ⁱ
- [Angelo State University Catalog](#)ⁱⁱ

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](#)ⁱⁱⁱ (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](#).^{iv} 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](#)^v for more information.

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](#)^{vi} 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](#)^{vii}

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](#).^{viii}

Information About COVID-19

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

Student Learning Outcomes

1. **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.
2. **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.
3. **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.
4. **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 Schedule

Important Dates

January 18: First day of class

March 14 – March 18: Spring Break

April 28: Last day to drop this course

May 9 – May 12: Final Exam Window

Weekly Schedule

Below is a tentative schedule, but it is likely to change throughout the semester.

- Week 1: Real numbers, exponents, radicals, and polynomials.
- Week 2: Factoring, Rational expressions, rectangular coordinate systems, and linear models.
- Week 3: Quadratic equations, linear inequalities.
- Week 4: Test 1, Functions, domain, and range.
- Week 5: Rates of Change, Linear Functions, Modeling, and Exponential Functions.
- Week 6: Graphs of exponential and logarithmic functions, and logarithmic properties & equations.
- Week 7: Exponential and Logarithmic Models and Systems of Linear Equations.
- Week 8: Test 2 and Simple Interest
- Week 9: Compound Interest, Annuities, and Loans.
- Week 10: Remaining balance and solving for time.
- Week 11: Test 3, Set Operations, and Venn Diagrams.
- Week 12: Cardinality, basic concepts of probability, and working with events.
- Week 13: Bayes' Theorem, Counting, and Expected Value.
- Week 14: Test 4.
- Week 15: Review for the Final Exam.

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

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

iii <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

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

v <https://angelo.policystat.com/policy/10659448/latest/>

vi <https://angelo.policystat.com/policy/10659368/latest/>

vii <https://www.angelo.edu/incident-form>

viii <https://www.angelo.edu/title-ix>

ix <https://www.angelo.edu/covid-19/>