Math 1324: Finite Mathematics
Course Syllabus

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

Instructor: Dr. Dennis Hall
Office: MCS 220H
Office Hours: M-F 1:45–3:45 and by appointment.
E-mail: dennis.hall@angelo.edu
Phone: 325-486-5426

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.


WebAssign: The electronic resource WebAssign will be used. To access WebAssign, click the “Access WebAssign” link in Blackboard.

Evaluation: Your grade for this course will be determined by your performance on tests, homework, quizzes, and a final exam. Final grades will be based on a standard 10-point grading scale.

The lowest 3 HW assignments and the lowest quiz are dropped. The lowest test is replaced by the final exam.

Important Dates

- June 4: First day of class
- June 22: Last day to drop a class
- July 3: Final Exam
- July 10: First day of class for Summer II
Homework: Homework will be assigned almost every day using WebAssign. See above for how to sign in. Late homework will be accepted with a 50% penalty. Your lowest three homework grades will be dropped.

Exams: There will be 3 in-class tests during the semester and a comprehensive final exam. Each test will count 15% of your final grade, and the final exam will count 30%. If it helps your final average, and you take each test, then your final exam grade will replace your lowest test grade. If you miss up to one test for any reason, then that test grade will be replaced with the final exam grade. Any other missed tests will result in a grade of zero.

Quizzes: Quizzes will be short in-class assignments that may be given throughout the semester. Quizzes cannot be made up, but your lowest quiz grade will be dropped.

Course Content: The following chapters including the particular sections listed are covered.

0. Algebraic Concepts: Sets, real numbers; exponents; radicals; operations with algebraic expressions; factoring; algebraic fractions.

1. Linear Equations and Functions: Solutions of linear equations and inequalities; functions; linear functions; systems of linear equations; applications of functions in business and economics.

2. Quadratic and Other Special Functions. Quadratic equations; quadratic functions: parabolas; business applications.


5. Exponential and Logarithmic Functions. Exponential functions; logarithmic functions and their properties; solution of exponential equations; applications.

6. Mathematics of Finance. Simple interest; compound interest; future value of ordinary annuities; present values of ordinary annuities; loans and amortization.

7. Introduction to Probability. Probability; odds; union and intersection of events; conditional probability; probability trees.

Student Disability Services:

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.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
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 via Turnitin. 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. (http://www.angelo.edu/opmanual/ – OP 10.19)

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.

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 Statement of Academic Integrity.

Copyright Policy:

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Title IX:

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU’s Title IX Coordinator:

Michelle Boone
Director of Title IX Compliance
325-486-6357
michelle.boone@angelo.edu

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
**Student Learning Outcomes:** Upon successful completion of the 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 college algebra including the real numbers, exponents, radicals, polynomials, factoring, functions, equations, inequalities, and graphs.

- 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, the quadratic formula, rules of exponents, and properties of logarithms.

- The 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.

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

<table>
<thead>
<tr>
<th>Week</th>
<th>Sections Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 1.1, 1.2, 1.3</td>
</tr>
<tr>
<td>2</td>
<td>Test 1 &amp; 1.5, 1.6, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3</td>
</tr>
<tr>
<td>3</td>
<td>Test 2 &amp; 5.1, 5.2, 5.3, 6.1, 6.2, 6.3</td>
</tr>
<tr>
<td>4</td>
<td>Test 3 &amp; 6.4, 6.5, 0.1, 7.1, 7.2, 7.3</td>
</tr>
<tr>
<td>5</td>
<td>Final Exam &amp; 7.4</td>
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