MATH 1324-T40
FINITE MATHEMATICS

Instructor: Dr. Simon Pfeil
Email: simon.pfeil@angelo.edu
Phone: (325) 486-5436
Office: MCS 219C

Office Hours: MWF: 1pm – 3pm
TR: 10am – 11am and 1pm – 2pm
…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, linear programming, matrices, systems of linear equations, 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 learning resources and supplemental materials posted in Blackboard.

**Required Texts and Materials**
The texts are 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 need to regularly complete homework in Blackboard.
Communication
Email is a great way to contact me. I 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.

Grading
Evaluation and Grades
Course grades will be determined as indicated in the table below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Sections 1.1 and 1.4</td>
<td>8.3%</td>
</tr>
<tr>
<td>2: Sections 1.5 and 1.6</td>
<td>8.3%</td>
</tr>
<tr>
<td>3: Sections 1.2 and 1.3</td>
<td>8.3%</td>
</tr>
<tr>
<td>4: Sections 2.1, 2.3 and 2.6</td>
<td>8.3%</td>
</tr>
<tr>
<td>5: Sections 2.5</td>
<td>8.3%</td>
</tr>
<tr>
<td>6: Sections 2.2, and 2.7</td>
<td>8.3%</td>
</tr>
<tr>
<td>7: Sections 3.1 and 3.2</td>
<td>8.3%</td>
</tr>
<tr>
<td>8: Sections 4.1, 4.2, and 5.1</td>
<td>8.3%</td>
</tr>
<tr>
<td>9: Section 7.1, 7.2, and 7.5</td>
<td>8.3%</td>
</tr>
<tr>
<td>10: Chapter “Growth Models”</td>
<td>8.3%</td>
</tr>
<tr>
<td>11: Chapter “Finance”</td>
<td>8.3%</td>
</tr>
<tr>
<td>12: Chapter “Sets” and Chapter “Probability”</td>
<td>8.3%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>+ or – one letter grade</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

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 (Grades are not rounded up)

Assignment and Activity Descriptions
The course grade will be based on the average of all assessment grades. Assessments will reflect the course content and be administered as exams during class. 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: Must complete the required homework exercises prior to the second attempt. The exam will be administered during office hours, scheduled with professor via email.
- Third attempt and on: Must meet with professor 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 90%. The student’s new score on the assessment is 90%.

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%.

The Final Exam will only adjust your final grade by at most one letter. Your Final Percentage is calculated as the averages of your assessment scores. That Final Percentage is then converted to a letter grade as described in the above grading system. The Final Exam will

- improve your letter grade by one letter if you score 90% or above,
- leave your letter grade unaffected if you score between 60% and 90%,
or lower your letter grade by one letter if you score below 60%.

**Assignment and Activity Descriptions**
Homework will be assigned regularly through Blackboard. It is there for your practice and improvement. It will not be counted toward your final grade. It is a prerequisite to retaking assessments.

**Policy on Late Work or Missed Assignments**
You may retake assessments up to the date of the final exam 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
- Angelo State University Catalog

**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.

**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. 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  
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 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 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 Boone, J.D.  
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210  
325-942-2022  
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

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 about Title IX in general you may visit www.angelo.edu/title-ix.

Course Schedule (tentative, and subject to change)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Syllabus, Sections 1.1 and 1.4</td>
</tr>
<tr>
<td>Week 2</td>
<td>MLK Jr. Day on Monday (no class), then Sections 1.5 and 1.6</td>
</tr>
<tr>
<td>Week 3</td>
<td>Sections 1.2 and 1.3, Assessment 1 and 2 on Friday, Jan. 31</td>
</tr>
<tr>
<td>Week 4</td>
<td>Section 2.1 and 2.3</td>
</tr>
<tr>
<td>Week 5</td>
<td>Sections 2.6 and 2.5, Assessments 3 and 4 on Friday, Feb. 14</td>
</tr>
<tr>
<td>Week 6</td>
<td>Sections 2.2 and 2.7</td>
</tr>
<tr>
<td>Week 7</td>
<td>Sections 3.1 and 3.2 Assessments 5 and 6 on Friday, Feb. 28</td>
</tr>
<tr>
<td>Week 8</td>
<td>Sections 4.1 and 4.2</td>
</tr>
<tr>
<td>Week 9</td>
<td>SPRING BREAK (no class this week)</td>
</tr>
<tr>
<td>Week 10</td>
<td>Section 5.1 and 7.1 Assessments 7 and 8 on Friday, Mar. 20</td>
</tr>
<tr>
<td>Week 11</td>
<td>Sections 7.2 and 7.5</td>
</tr>
<tr>
<td>Week 12</td>
<td>‘Growth Models’, Assessments 9 and 10 on Friday, Apr. 3</td>
</tr>
<tr>
<td>Week 13</td>
<td>SPRING HOLIDAY on Friday (no class)</td>
</tr>
<tr>
<td>Week 14</td>
<td>‘Sets’</td>
</tr>
<tr>
<td>Week 15</td>
<td>‘Probability’, Assessments 11 and 12 on Friday, Apr. 24</td>
</tr>
<tr>
<td>Week 16</td>
<td>DEAD WEEK, Review and retakes all week</td>
</tr>
<tr>
<td>Week 17</td>
<td>Final Exam on Tuesday, May 5 from 10:30am-12:30am in MCS 215</td>
</tr>
</tbody>
</table>

---

1. [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
2. [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
4. [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)
5. [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
6. [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)