Math 1324 T  
Finite Mathematics  
Spring 2019

Instructor: Mrs. Autumn Hoover  
Fax: (325) 942 – 2503  
Office: MCS 220M  
e-mail: Autumn.Hoover@angelo.edu  
Office Phone: (325) 486-5431

Office Hours:

Monday:  9:00 – 10:00,  1:00 – 3:30  
Tuesday:  8:30 – 9:30,  11:00 – 11:30  
Wednesday:  9:00 – 10:00,  1:00 – 3:30  
Thursday:  8:30 – 9:30,  11:00 – 11:30  
Friday:  By appointment (I am usually here 9:00 -10:00 and 1:00 – 2:00)

Textbook: Mathematical Applications for the Management, Life and Social Sciences 11th ed. by Harshbarger and Reynolds. You do not need the access code, just the textbook.

Course Content: Refer to the attached Student Learning Outcomes and Content sheet for information on the topics covered in this course.

T - Section: A T - Section is a college credit bearing course paired with additional support for those students who are not TSI complete.

- T - Sections allow students to take their college level mathematics class with additional support. This course design is ideal for students who have math deficiencies but are willing to put forth the time and effort needed to complete the course satisfactorily.

Math Lab: The math learning lab is available on campus and provides free math tutoring. Please utilize this great resource – no appointment is required.

- MATH LAB – LIB C302
  - Monday – Thursday: 9:00 am – 8:00 pm  
  - Friday: 9:00 am – 12:00 pm  
  - Sunday: 4:00 pm – 8:00 pm

Blackboard/Email:

- I plan to post your daily assignments, class notes, class announcements and other documents on Blackboard. I will expect you to print these documents and bring them to class with you.
- Blackboard can be accessed through RamPort or by visiting Blackboard.
- I may send you information via email. It is your responsibility to regularly check your angelo.edu email account.

Attendance:

- Class attendance will be taken daily.
- Absences are reported to the administration and play an important role in suspension considerations.
- You are expected to attend all scheduled class meetings, arrive on time, and stay for the entire class period.
- You will be marked absent if you are more than 10 minutes late or if you leave early. I will count three tardies as an absence.
- Perfect attendance will get you 2 points added to your final course grade, 1-3 absences will get you 1 point.

Calculators: You will be allowed to use calculators in this class. You MAY NOT use a graphing calculator. You do not need to go buy an expensive calculator. If you do not have a calculator, an inexpensive one that will work for this course is a TI 30XII S. It runs $10-$15.
Homework:

- There will be daily assigned exercises from the textbook or handouts and will follow the **Homework Guidelines** attached to this syllabus.
- Homework is due at the **BEGINNING** of class and **NO LATE HOMEWORK** will be accepted for any reason, including absences. If you have trouble completing a homework assignment, see me for assistance before it is due.
- If you are absent, it is your responsibility to contact me or view Blackboard in order to get the new homework assignments.
- You may send your homework to class with a friend, scan or take a picture of it and email it to me or fax it to the office. They must be **received prior to the beginning of class**.
- I will drop 4 homework grades. This is the leeway you are given to allow for unavoidable absences. Do not waste them.

Exams:

- We will have four regular exams and a comprehensive final exam on: **Monday, May 6, 2019, 10:30 – 12:30**
- If you miss an exam, you need to get in touch with me immediately. The final exam can replace one missing exam grade. If you haven’t missed an exam, the final can replace your lowest test grade if it is to your benefit.
- You may take an exam early ONLY if I excuse the absence.
- If you leave the room during an exam, I may take your test and grade it **AS IS**!

Grading Scheme:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Average</td>
<td>15%</td>
</tr>
<tr>
<td>Exams (15% each)</td>
<td>60%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

Letter grades will be assigned in this course as follows:

- 90 – 100 : A
- 80 – 89: B
- 70 – 79: C
- 60 – 69: D
- Below 60: F

Common Courtesy:

- Turn off all cell phones or any other electronic devices before entering the classroom. Place these items in your backpacks. I do not want to see them on your desk or in your laps. **THIS MEANS NO TEXTING DURING CLASS!** I reserve the right to ask you to leave class if I catch you on your phone.
- Please refrain from carrying on personal conversations once class has started. Be courteous to your peers when they are responding in class by listening to what they have to say.

Homework Guidelines for written work from the textbook:

1. **Print an answer sheet** from Blackboard to record your answers. This will be the first page of your homework assignment. Insert the problem number with the answer in order. **Fill in the first column before continuing in the second column.**
2. Fold your homework in **half vertically** with your name and row number visible on the outside.
3. No spiral paper is allowed.
4. Write legibly. Clearly indicate the page number, problem number, and **show all work** in an organized manner. If your answer cannot be read, it’s **WRONG**. Your homework assignment should not look like scratch paper.
5. **STAPLE** your work **behind** the answer sheet before folding it vertically.
6. You CAN use both sides of a sheet of paper.

**WARNING:** **POINTS MAY BE DEDUCTED IF THESE STANDARDS ARE NOT FOLLOWED!!**
Drop Date:
Thursday, March 28, 2019 is the last day to drop a course with a W or withdraw from ASU. However, you may not drop this class unless you become TSI complete by passing the math section of the TSIA.

University Policies:

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. (OP 10.19 Student Absence for Observation of Religious Holy Days) You are still responsible for completing all course work missed on that day.

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

- If you have any simpler needs (like needing me to speak louder, needing to sit in a certain location, needing a larger font, etc.), let me know immediately.

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
325-942-2022
michelle.boone@angelo.edu

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 Conduct Policies:

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 to disciplinary action and possible expulsion from ASU. The College of Science and Engineering adheres to the Statement of Academic Integrity

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.

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.

General Policies Related to this Course

All students are required to follow the policies and procedures presented in these documents:
  o Angelo State University Student Handbook
  o Angelo State University Catalog
Student Learning Outcomes

1. **The 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 set theory, inequalities, linear and quadratic equations, number systems, polynomials, exponents, logarithms, matrices, probability, and mathematics of finance.

2. **The 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. **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.

4. **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 Content

**Textbook:** *Mathematical Applications, 11th edition*, by Harshbarger and Reynolds. 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.

3. **Matrices.** Matrices; multiplication of matrices; Gauss-Jordan elimination.

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.
The subject matter schedule listed below is tentative, and subject to change and adaptation. For current, updated information about course topics, contact the instructor or see Blackboard.

### Spring 2019  MWF

<table>
<thead>
<tr>
<th>Course week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Syllabus; Real Numbers; Exponents; Radicals</td>
</tr>
<tr>
<td>2</td>
<td>Radicals; Rational Exponents; Polynomials</td>
</tr>
<tr>
<td>3</td>
<td>Factoring; Algebraic Fractions</td>
</tr>
<tr>
<td>4</td>
<td>Review; <strong>Exam 1</strong>; Linear Equations</td>
</tr>
<tr>
<td>5</td>
<td>Functions; Linear Functions; Systems of Linear Equations</td>
</tr>
<tr>
<td>6</td>
<td>Business Applications; Quadratics</td>
</tr>
<tr>
<td>7</td>
<td>Quadratic Business Applications; Review; <strong>Exam 2</strong></td>
</tr>
<tr>
<td>8</td>
<td>Matrices; Matrix Applications; Guass-Jordan Elimination</td>
</tr>
<tr>
<td>9</td>
<td>Exponential Functions; Logarithms</td>
</tr>
<tr>
<td>10</td>
<td>Exponential and Logarithmic Applications</td>
</tr>
<tr>
<td>11</td>
<td>Review; <strong>Exam 3</strong>; Simple Interest</td>
</tr>
<tr>
<td>12</td>
<td>Compound Interest; Future Value Annuities</td>
</tr>
<tr>
<td>13</td>
<td>Present Value Annuities; Loans and Amortizations</td>
</tr>
<tr>
<td>14</td>
<td>Review; <strong>Exam 4</strong>; Sets; Probability</td>
</tr>
<tr>
<td>15</td>
<td>Probability; Final exam review</td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>Final Exam <strong>Monday, May 6, 2019</strong>, 10:30 – 12:30</td>
</tr>
</tbody>
</table>

---

i [http://blackboard.angelo.edu](http://blackboard.angelo.edu)

ii [http://www.angelo.edu/opmanual/](http://www.angelo.edu/opmanual/)