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
Juan Montemayor  
Office: MCS 219 F  
Phone #: 325 – 486 – 5438  
Email: juan.montemayor@angelo.edu

Office Hours
Monday and Wednesday: 8:30 -9:00 AM, 10:00-11:00 AM, 1:45-2:00 PM, 3:00-4:15 PM  
Tuesday and Thursday 9:30 – 11:00 AM and 2:30 – 3:15 PM also Friday: 10:00-11:00 and 1:30 – 2:00 PM

Math Lab Hours – Tentative Hours
located on the third floor of the library room C302  
Monday – Thursday: 9:00 AM – 8:00 PM, Friday: 9:00 AM – 12:00 PM, and Sunday 4:00 – 8:00 PM

Notice
You are encouraged to be in attendance during each class meeting. No make-ups will be given for missed quizzes, homework assignments, or exams. **If you leave early, come late, leave the classroom you may be counted absent for the day.** There are only two major exams to be given in the classroom. If you miss the midterm exam, a meeting between student and instructor will be held to see if anything can be done to alleviate the problem. Student must initiate the conversation with a **written valid excuse** stating the reason for missing exam. If the excuse is deemed to be valid by the instructor, then a solution will be proposed by the instructor. In most cases a comprehensive final exam will be given and grade will replace missed exam. Otherwise, the grade for missed exam will become a zero.

Cell Phone Use
Use of cell phone in class is strongly discouraged. Put phone away when entering classroom. You may be asked to leave the class if you are seen making use of your cell phone in any manner. Touching, glancing, and leaving the classroom to answer the phone will all be considered instances of disruption to the class and **any disruption of class will result in immediate dismissal from class.** You may return to class only after a meeting with instructor outside of class time. In case you have a need for your phone – emergencies – let me know and an exception will be made for that case.

Important Dates
Exams  
Exam 1 on Feb. 15  
Exam 2 on March 25  
Exam 3 on April 26  
Exam 4 (Final Exam) on Wednesday May 8  
Drop Day: Thursday March 28

Textbook
*Mathematical Applications, 11th edition,* by Harshbarger and Reynolds
Grading Periods
There will be four grading periods (each will count as 25% of semester grade).
Each of the first three grading periods will consist of two take-home exams, a quiz average, and an in-class exam. The last grading period will consist entirely of the final exam. More will be said in class about the grading process.

Daily Grade
You will be given quizzes and homework on an almost daily basis – every other class day. You will have six quizzes (and homework assignments) during each testing period. The lowest of each six of the grades (for both homework and quizzes) of grading period will be dropped and the remaining five grades will be averaged to get a homework and a quiz average for the testing period. More will be discussed on the first day of class.

Homework
It is strongly suggested that you attempt every problem assigned for homework. It will help you learn the material and prepare you for quizzes and exams. Homework average is worth 7% of the grade for each testing period. If you have excessive absences, the percentage drops to 3.5%.

Quizzes
A quiz is worth 7% of the testing period unless you have excessive absences. You must be in class to get any credit on quiz. No make-ups on missed quizzes. If you do have more than four absences during the testing period, your quiz average will only count 3.5% of the grade on the testing period. Quizzes will normally be given during the first five minutes of class but they can be given at the end of class.

Attendance
Attendance is essential to learning new material. You may be counted absent if you are late or if you leave the classroom for any reason during lecture. If you have three or more absences during the testing period or a total of eight or more absences for the semester, you will be classified as having excessive absences.

Take Home Exams
You will be given two take home exams during each testing period. Each of the take home exams is worth 7% of the testing period grade. If you have excessive absences, the percentage is reduced to 3.5%. Rules and guidelines will be posted online. Guide lines must be followed. No exceptions will be made. You are allowed – even encouraged – to work together on these exams. You can get help from any available source. My only suggestion is that you make an attempt to answer as many questions as you can in one sitting with no help from any source. This will give you an idea of how much of the material you actually know. If you work hard, you can learn the remaining material. If you do not, the grade on your exams exam will be a good indication of how much you knew before you started to get help.
Exams
Exams are the most important part of your grade, they make up at least 72% of your semester grade. If you have excessive absences, the percentage increases to 86%. No makeups or time extensions will be given. No additional ways to get bonus points will be available.

Semester Letter Grade
A semester average will be computed based on quiz average, take-home exams (average), and from in class exams. An in-person explanation of the grading process will be given on first day in class.

100 – 90 is an A, 80-89 is a B, 70-79 is a C, 60 – 69 is a D, any average below 60 is an F.

Use of calculators
There will be sections of an exam and quiz that calculator will not be allowed. When a calculator is used, it must be a non-graphic calculator. Your work should be shown and it the work should support your solution. Your answer should be non-calculator based; answers like 2/3 or \( \sqrt{2} \) are acceptable but not 0.67 or 1.4. If work is done at home, you may use a calculator but your answers cannot be calculator based.

Mathematics 1324 – Finite Mathematics I

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.
Tentative Schedule with tentative exam dates
Please note that this schedule is subject to change on a daily basis; check Blackboard for up-to-date information.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
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| 1    | Introduction – sections 0.1 and 0.2  
Sets; properties and operations of sets, Universal set, empty set, union, intersection, venn diagram, complement of a set, and more  
Numbers sets;  
counting numbers, whole numbers, integers, rational numbers, irrational numbers, and the set of real numbers, properties of real numbers  
an introduction to exponent and exponent notation |
| 2    | Section 0.3 and 0.4  
exponents and radicals  
Section 0.5 An introduction to polynomials and algebraic expressions  
definition of polynomials, operations with polynomials and algebraic expressions; |
| 3    | Section 0.5 finish polynomials and polynomial operations  
Section 0.6 factoring polynomials;  
Section 0.7 algebraic fractions. |
| 4    | Section 1.1 linear equations and inequalities in one variable  
Sections 1.2 and 1.3  
functions and linear functions  
Exam 1 |
| 5    | Section 1.5 Solutions of systems of linear equations  
Section 1.6 Applications of functions in Business and Economics |
| 6    | Section 2.1 Quadratic Equations  
Section 2.2 Quadratic Functions – parabolas |
| 7    | Section 3.1 Matrices and multiplications of matrices  
Catch up on material - exam 2 on Friday |
| 8    | Section 3.3 Gauss-Jordan Elimination method  
Section 5.1 Exponential Functions |
| 9    | Section 5.2 Logarithmic functions and their properties  
Section 5.3 Equations and applications with Exponential and Logarithmic functions |
| 10   | Section 6.1 Simple Interest and sequences  
Section 6.2 Compound Interest and geometric sequences |
| 11   | Sections 6.3, 6.4, and 6.5 Annuities and Loans and amortization  
Exam 3 |
| 12   | Finish chapter 6 and catch up day |
| 13   | Sections on chapter 7 |
| 14   | Sections on chapter 7 |
| 15   | Finish chapter 7  
Catch up on material and review for final exam |
| 16   | Final exam  
Wednesday May 8 @ 8:00 – 10:00 AM for class that meets at 9:00 – 9:50 AM MWF  
Wednesday May 8 @ 10:30 AM – 12:30 PM for class that meets at 11:00 – 11:50 AM MWF  
Monday May 6 @ 3:30 PM - 5:30 PM for class that meets at 2:00 – 2:50 PM MWF |
**Student Responsibilities**

The student is solely responsible for:

- Completing each assignment by the specified due date.
- Obtaining assignments and other materials for classes from which they are absent.
- Utilizing, as needed, all available study-aid options (including meeting with the instructor, referring to outside texts, etc.) to resolve any questions that they might have regarding homework, course material, etc.
- Realizing from the beginning of the course the grade that they may need or want to graduate, maintain a scholarship, stay in athletics, etc. … and give as much effort as it takes to obtain this grade.

**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

**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. Sex discrimination, sexual misconduct, public indecency, interpersonal violence, sexual assault, sexual exploitation, sexual harassment, and stalking are not tolerated at ASU. As a faculty member, I am a Responsible Employee meaning that I will report any allegations I am notified of to the Office of Title IX Compliance in order to connect students with resources and options in addressing the allegations reported. You are encouraged to report any incidents to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator. You may do so by contacting:

Michelle Boone, J.D.  
Director of Title IX Compliance/Title IX Coordinator  
Mayer Administration Building, Room 200  
325-942-2022  
michelle.boone@angelo.edu

You may also file a report online 24/7 at [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form).  
michelle.boone@angelo.edu
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. The full details can be found in ASU Operating Policy OP 10.19 Observance of Religious Holy Days.¹

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 of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the Statement of Academic Integrity.³

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.⁴

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:
  - Angelo State University Student Handbook
  - Angelo State University Catalog

- In the event that the university is closed for a scheduled class time, whatever was scheduled for that day and/or whatever was due that day will be scheduled and/or due on the next scheduled class time.

- All electronic correspondence will be sent to your ASU e-mail account unless other arrangements are made.

- Feel free to come by my office at any time for help. I will definitely be near my office during my office hours (or there will be a note telling you when I will be back). If my office hours are not convenient for you, meet with me to arrange for another time that is more convenient.

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i Observance of Religious Holy Days: http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of

ii Grading Procedures: http://www.angelo.edu/content/files/14197-op-1011-grading-procedures

iii Academic Integrity: http://www.angelo.edu/student-handbook/community-policies/academic-integrity.php

iv ASU Writing Center: http://www.angelo.edu/dept/writing_center/academic_honesty.php


vi University Catalog: http://www.angelo.edu/catalogs/