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 and view the updated syllabus version on blackboard (modified/updated syllabus).

Statements below were written for in class instruction so they may not be relevant to online class TBA for class time – class is online but exams and quizzes will be given at a standard time determined by instructor with input from students. I will send out a questionnaire as to best time for testing – if a time does not satisfy all students, a second time will be chosen (and if need be a third time).

Instructor

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

Office Hours

Office hours will be made available once class time is official. Expect hours on Monday through Friday to be a total of ten hours tentatively sometime between 8:30 AM and 11:00 AM and/or between 3:00 PM and 5:00 PM. Times may be modified by beginning of semester.

Math Lab Hours — Tentative Hours will be made available on blackboard by student lab assistant(s). Additional help may be available from class assistant (grader). Students are encouraged to work together on homework and help is allowed on quizzes – time is limited so be selective and prepared.

When available the Math lab may be found on the third floor of the library room C302 – NOT available during summer — online help will be available.

Notice

You are encouraged to be in attendance during each class meetings (spend minimum of two hours per day reading lecture material and completing homework and quiz assignments). No make-ups will be given for missed quizzes, homework assignments, or exams. Deadlines will not be extended – assignments are due by 10:00 AM but you will be given extended allowance till 8:00 PM on that day. You cannot ask for help after 8:00 PM and expect computer problems occurring after 8:00 PM to be an excuse for not turning in assignment. Do not wait.

We will need to come up with one or at most two times (two hour time period) where you are able to take exams and maybe quizzes. Each type of assignment has a time limit and a due date – if you wait till the last moment, you may have technical difficulties that I will not be able to resolve – don’t wait till the last moment.

Computer/ Calculator/ Cell Phone Use/ IT Help Desk (325) 942-2911

You will need to have a computer/laptop or desktop available for use on exam and quizzes. A camera needs to be available when taking quizzes or tests. Calculators are not needed and should not be used at any time. Cell Phones may be used at your discretion but not for calculator purposes. Cell phones are not a good alternative to computers when taking tests or quizzes. Time may be of the essence. You will be submitting assignments, quizzes, and tests online. Make sure you are able to scan documents when necessary onto blackboard. Some instruction may be provided. Never Panic over technology. If you cannot do it, it is quite possible that your instructor may not be able to do it either. IT help desk (325) 942-2911
Important Dates
Exams will be given on each Monday of the summer term (second summer term) with final exam on Wednesday Aug. 5. You will have at most two times during the day during which exams will be available. Times will be discussed at beginning of semester. You will have limited amount of time to complete exams.


Grades – homework and quizzes will be given during the semester but the bulk of the grade will come from exams

Homework
It is strongly suggested that you attempt every problem assigned for homework. This will help you learn the material and prepare you for quizzes, exams, and future courses. I may choose several problems to grade instead of the entire homework assignment.

Quizzes
Notes and homework is the best preparation for exams and quizzes. Quizzes will be timed and either answered online (blackboard), or scanned, saved on your computer, and returned on blackboard.

Attendance – will be taken on a daily basis
Attendance is essential to learning new material. For online class, attendance equates to making sure that you review/study/ learn material on notes (minimum of two hours of daily work). Take quizzes and exams on time. If there is a deadline, do not wait till the last moment (midnight). Those of you willing to study will find that the notes and homework will provide the best learning tool. Make use of them. Make use of online office hours – ask questions, become comfortable – if you are not comfortable in a group setting, ask for individual time with instructor and/or teaching assistant.

Exams
You will be given four exams plus a final exam that will be taken online – total of five exams. Tests will be timed (time limit) and must be taken at a particular time decided by instructor. Make sure to have access to a camera – I may use zoom or blackboard collaborate to keep an eye on you while you take an exam/quiz. A phone will not be acceptable. If I have discussion over class material or to answer questions, I will conduct a video session with a posting of the recording.

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
You will not be allowed to use calculators in class when completing quizzes or exams. All answers are expected to be non-calculator based. Square root of 2 is a good answer while its approximated value 1.41 is not.
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.


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

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

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

Tentative Schedule with tentative exam dates – outline for long semester – will be modified for summer
term
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   | Section 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.
  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.

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.

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:
  - 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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1 Observance of Religious Holy Days: [http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
2 Grading Procedures: [http://www.angelo.edu/content/files/14197-op-1011-grading-procedures](http://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
4 ASU Writing Center: [http://www.angelo.edu/dept/writing_center/academic_honesty.php](http://www.angelo.edu/dept/writing_center/academic_honesty.php)
6 University Catalog: [http://www.angelo.edu/catalogs/](http://www.angelo.edu/catalogs/)