Math 1324T – Finite Mathematics T Section
Spring 2018 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 Information
Mrs. Ellen Moreland
Office: MCS 220C
Office Hours:  Monday 10 – 12; 2 – 3
           Tuesday 11 -- 12; 3:30 -- 4:30
           Wednesday 10 – 12; 2 - 3
           Thursday 11 – 12; 3:30 – 4:30
Phone: 325-486-5439
Fax: 325-942-2503
Email: Ellen.Moreland@angelo.edu

What is a T - Section?
• A T - Section is college credit bearing course paired with supplemental instruction for those students who are not TSI complete.
• T - Sections allow students to take their college level mathematics class (with supplemental instruction) immediately rather than having to first spend a semester or two taking developmental mathematics courses prior to being allowed to take college level mathematics. This course design is ideal for students who have mathematical deficiencies but, are willing to put forth the time and effort needed to complete the course satisfactorily.
• The course materials and lessons for the college level course and supplemental instruction will complement each other. In a way, each part of the T – Section reinforces and helps the other part.
• Learning communities are a great way to begin college life. We will heavily stress learning communities. You will work some problems in groups with each person in the group contributing their fair share to the effort. You will be asked at times to be peer tutors for others that are struggling. The nature of the material is such that (each topic is very different from other topics) each of you will find topics in which you excel and other topics in which you struggle. This is where peer tutoring will become very helpful!

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 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 with 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.

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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.

**Major Course Requirements**

**Use of Blackboard**
- Handouts will be placed on Blackboard for you to print as necessary.
- They will appear under the tabs labeled **Course Info** (syllabus) and **Course Documents** (handouts needed for class and homework)

**Use of Calculators**
- All students will need a **NON-GROPHING CALCULATOR.** I suggest **TI-30XII..** We will discuss the type of calculator needed on the first day of class.

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Attendance:
- Attendance will be taken daily and is mandatory for the entire class period! Excessive absences are reported to the administration and play a definite role in suspension considerations. Remember that I can teach you more in one hour than you can learn on your own in several hours. So, for your own sake, attend every class!!

Daily Work
- Daily work will consist of traditional homework problems assigned from the text book or worksheets supplied to student through blackboard.
- Once you have completed an assignment, go to blackboard and print an assignment cover sheet. Put answers on the cover sheet and staple work to the back of the cover sheet. Be sure to put your name and row on the cover sheet. Fold the assignment lengthwise.
- I will drop 4 homework/quiz grades at the end of the semester.
- If you are absent for any reason, the homework can be delivered by a friend to my office or emailed to me prior to the start of the class. If I do not receive it prior to the beginning of class, it will become one of the four dropped grades!
- NO LATE HOMEWORK WILL BE ACCEPTED!! The 4 dropped grades are meant to replace homework missed due to illness or emergency. Save them for when you are ill! Once they are used, any missing homework for any reason will be a zero!!
- To receive credit for homework assignments, they must be placed on my desk prior to the beginning of lecture.

Exams
- We will have four regular exams and a final. The final exam will be cumulative. The exact dates and coverage of these tests will be announced in class; however, as a planning guide, you may expect to take the first exam on the 8th class day, the second exam on the 16th class day, the third exam on the 22nd class day, the 4th exam on the 27th class day; and the final exam will be held on Tuesday of final exams week from 8 am to 10 am for the 8 am class and from 1 pm to 3pm for the 12:30 pm class. There will be NO MAKE-UP EXAMS! Therefore, if you miss an exam, the final exam will count twice, once for itself and once for the missing exam grade. If you are ill on an exam day, get a note from the clinic and call me immediately!
- Exams will be given during the Math 1324 portion of the class. We will then begin new material the second half of class.

Grading:

<table>
<thead>
<tr>
<th>Daily Average (homework, worksheets, and quizzes)</th>
<th>20%</th>
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</thead>
<tbody>
<tr>
<td>Each of four regular exams</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

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Final Grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Average 90 or above</th>
<th>Average 80-89</th>
<th>Average 70-79</th>
<th>Average 60-69</th>
<th>Average under 60</th>
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<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
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- **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**
  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

- **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/](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](http://www.angelo.edu/opmanual/) for more information.

- **Student Conduct Policies**

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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

Class Rules:

- Arrive on time and remain entire class period! We will take a break of 10 - 15 minutes between the lecture and the supplemental portion of the class.

- No IPODS or MP3 players – you cannot listen to a lecture while listening to music!

- Cell phones are to be turned off during class!

- Cell phones must be placed in backpacks below desk during exams!!!!!

- No talking while I am talking – this is disruptive to your fellow students.

- No food or drinks in classrooms unless absolutely necessary (due to illness). If you do need a drink, please be sure it has a cover to prevent spills.

- All students are to be respectful and courteous to each other and the instructor. This is not high school! You are adults and I expect you to act as such!!

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Math Lab:

- The Mathematics Department offers a Math Lab. This lab is an open lab meaning that you are not required to attend but can come and go as you please and as you need help. It is free tutoring so please take advantage of it!!!
- Math Lab is located on the third floor of the library, Room C302.

MATH LAB HOURS- FALL 2017
Monday – Thursday
9:00am-8:00pm
Friday 9:00am-12:00pm
Sunday 4:00 pm – 8:00 pm

Subject Matter: subject to change at discretion of instructor

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic 1324</th>
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<tbody>
<tr>
<td>1.</td>
<td>forms, syllabi, exponents</td>
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<tr>
<td>2.</td>
<td>exponents, radicals</td>
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<td>3.</td>
<td>radicals, polynomials</td>
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<td>4.</td>
<td>polynomials, factoring</td>
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<td>5.</td>
<td>factoring, algebraic fractions</td>
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<td>6.</td>
<td>algebraic fractions, linear equations</td>
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<td>7.</td>
<td>linear and rational equations, review for exam 1</td>
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<td>8.</td>
<td>exam 1, equations of lines</td>
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<td>9.</td>
<td>equations of lines, systems of equations</td>
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<td>10.</td>
<td>systems of equations, business applications of equations of lines and systems of equations</td>
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<td>11.</td>
<td>business applications of equations of lines and systems of equations, quadratics</td>
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<td>12.</td>
<td>quadratics and business applications</td>
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<td>13.</td>
<td>quadratics business applications, matrices</td>
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<td>14.</td>
<td>matrices</td>
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<td>15.</td>
<td>logarithms, review for exam 2</td>
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<td>16.</td>
<td>exam 2, logarithms, math of finance</td>
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<td>17.</td>
<td>math of finance</td>
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<td>20.</td>
<td>math of finance</td>
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<td>21.</td>
<td>review for exam 3, sets</td>
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<td>22.</td>
<td>exam 3, probability</td>
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<td>23.</td>
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<td>24.</td>
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<td>25.</td>
<td>probability</td>
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<td>26.</td>
<td>probability, review for exam 4</td>
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<tr>
<td>27.</td>
<td>exam 4, probability</td>
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<tr>
<td>28.</td>
<td>review for final exam</td>
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<tr>
<td>29.</td>
<td>review for final exam</td>
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Please feel free to come to my office for help!!!

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