MTH 143 – Finite Mathematics – Fall 2018

Name:  Hilary Dosser  
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Email:  dosserh@sfasu.edu  
Office:  Math 333

Class meeting time and place:  
Section 001 – MWF 9:00-9:50 – Math 202  
Section 003 – MWF 11:00-11:50 – Math 202  
Section 004 – MWF 12:00-12:50 – Math 202

Office Hours:  
These hours have been set aside specifically to help students.  

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>10:00-11:00</td>
<td>9:00-9:30</td>
<td>10:00-11:00</td>
<td>9:00-9:30</td>
<td>10:00-11:00</td>
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<td>12:15-12:45</td>
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<td>12:15-12:45</td>
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Additional times are available by appointment

Course description:  
MTH 143 covers mathematical functions and graphs, linear systems of equations, matrices, linear programming, mathematics of finance, and applications.

Core Objectives (CO):  
1. Critical Thinking [CO 1]: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information  
2. Communication Skills [CO 2]: to include effective development, interpretation and expression of ideas through written, oral and visual communication  
3. Empirical and Quantitative Skills [CO 3]: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes:  
At the end of MTH 143, a student who has studied and learned the material should be able to:  
1. Use linear functions and quadratic functions in business applications. [CO: 1,2,3]  
2. Use matrices to solve systems of linear equations. [CO: 1,3]  
3. Use matrices to solve linear programming problems. [CO: 1,3]  
4. Use exponential functions and logarithmic functions and to solve equations using these functions. [CO: 1,2,3]  
5. Solve simple interest and compound interest problems including annuities. [CO: 2,3]  

This is a general education core curriculum course and no specific program learning outcomes for this major are addressed in this course.

Text and Materials:  
The textbook is Finite Mathematics with Applications in the Management, Natural, and Social Sciences, 12th Edition, by Lial, Hungerford, Holcomb, and Mullins. Chapters 1 through 7 will be covered in this course.

Online homework will be required using My Math Lab at www.mymathlab.com. When you create your account, use the correct course ID:  
Section 001 (MWF 9:00):  dosser92097  
Section 003 (MWF 11:00):  dosser92998  
Section 004 (MWF 12:00):  dosser65233

Fill-in-the-blank notes will be posted on d2l for each section that we cover. You are responsible for printing them and bringing them to class.

You will need a calculator daily in this class. A graphing calculator is acceptable, however a scientific calculator will be sufficient. The calculator function of a cell phone will not be permitted during tests or quizzes.
Course Requirements:
The there will be three exams and a final exam. The final exam is comprehensive and mandatory. Your final exam grade can be used to replace a low or missing exam grade. Therefore, there will be no make-up exams. If you miss an exam, your final exam grade will be substituted in place of the missing exam grade.

Please note that the dates for our in-class exams in the calendar below are subject to change. The final is university scheduled and cannot be taken at a different time without permission of the Dean of the College of Sciences and Mathematics.

Grading Policy:
Your final grade will be determined as follows:

- **Daily Average (CO: 1,2,3)**:
  - 90% - 100% A
  - 80% - 90% B
  - 70% - 80% C
  - 60% - 70% D
  - 0% - 60% F

- **Tests (3 @ 20% each) [CO: 1,2,3]**
  - 90% - 100% A
  - 80% - 90% B
  - 70% - 80% C
  - 60% - 70% D
  - 0% - 60% F

- **Comprehensive Final Exam [CO: 1,2,3]**
  - 90% - 100% A
  - 80% - 90% B
  - 70% - 80% C
  - 60% - 70% D
  - 0% - 60% F

20% of your grade will be determined by your daily average. This will include in-class activities, worksheets, quizzes, homework assignments, My Math Lab, etc. In-class activities, worksheets, and quizzes cannot be made up. Homework and My Math Lab assignments will not be accepted late. However, I will drop one or two of the daily grades at the end of the semester.

Course Calendar:
The following is a tentative calendar for MTH 143 for this semester.

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>8/27 – 8/31</td>
<td>Syllabus</td>
<td>1.1 Graphs</td>
<td>1.2 Functions</td>
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<tr>
<td>9/3 – 9/7</td>
<td>1.2 Functions</td>
<td>2.1 Solving Linear Equations</td>
<td>2.2 Linear Functions</td>
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<tr>
<td>9/10 – 9/14</td>
<td>2.3 Applications of Linear Functions</td>
<td>2.3 Applications of Linear Functions</td>
<td>2.4 Systems of Linear Equations</td>
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<tr>
<td>9/17 – 9/21</td>
<td>2.4 Systems of Linear Equations</td>
<td>Review</td>
<td>Exam 1 – Friday, September 21</td>
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<tr>
<td>9/24 – 9/28</td>
<td>2.5 Linear Programming: The Graphical Method</td>
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<tr>
<td>10/1 – 10/5</td>
<td>3.1 Matrix Operations</td>
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<td>10/8 – 10/12</td>
<td>3.2 Gauss-Jordan Elimination</td>
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<td>10/15 – 10/19</td>
<td>3.2 Gauss-Jordan Elimination</td>
<td>Review</td>
<td>Exam 2 – Friday, October 19</td>
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<td>10/22 – 10/27</td>
<td>3.3 Linear Programming: The Simplex Method</td>
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<td>10/29 – 11/2</td>
<td>4.1 Solving Quadratic Equations</td>
<td>4.2 Quadratic Functions and Applications</td>
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<tr>
<td>11/5 – 11/9</td>
<td>5.1 Exponential Functions</td>
<td>5.2 Applications of Exponential Functions</td>
<td>5.3 Logarithmic Functions</td>
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<tr>
<td>11/12 – 11/16</td>
<td>5.4 Solving Exponential and Logarithmic Functions</td>
<td>Review</td>
<td>Exam 3 – Friday, November 16</td>
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<td>11/19 – 11/23</td>
<td>Thanksgiving Break</td>
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<td>11/26 – 11/30</td>
<td>6.1 Simple and Compound Interest</td>
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<td>6.2 Annuities and Loans</td>
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<tr>
<td>11/3 – 11/7</td>
<td>6.2 Annuities and Loans</td>
<td>Review</td>
<td>Review</td>
</tr>
<tr>
<td>11/10 – 11/12</td>
<td>Final Exams – Section 001 (MWF 9:00) – Monday, December 10, 8:00-10:00</td>
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<td>Section 003 (MWF 11:00) – Monday, December 10, 10:30-12:30</td>
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<td></td>
<td>Section 004 (MWF 12:00) – Wednesday, December 12, 1:00-3:00</td>
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Per SFA policy 5.4, this schedule reflects that there is (1) an amount of student work per credit hour that reasonably approximates not less than one hour of class or direct faculty instruction and two hours of out-of-class student work per week for fifteen weeks over a long semester, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as outlined in item 1 above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

**Attendance Policy:**

Attendance is expected and recorded for all students. Attendance will not be formally factored into your course grade, however, missing in-class activities, quizzes, etc, could lower your daily average. Also, missing classes will significantly reduce the instruction you receive, and will therefore naturally decrease your semester grade.

You must make a commitment to attend every class, to arrive on time and to stay the entire time. Bring all necessary materials to each class, be attentive to the task at hand, take notes, and be prepared to participate in class discussions. You must make an additional commitment of doing work outside of class - one to two hours every day. Most importantly, ask for help when you need it.

**Additional Help:**

Free tutoring is available from the AARC. They offer Learning Teams, one-on-one tutoring, and the Math Walk-in Table. The hours for the Walk-in Table will be 1pm to 8pm Monday, Tuesday, Wednesday, and Thursday as well as 4pm to 8pm on Sundays. Sign-ups for Learning Teams begin soon. If you need help signing up, the AARC staff (first floor of library, right-hand side) will be happy to assist. You can find more information on the AARC website, [www.sfasu.edu/aarc](http://www.sfasu.edu/aarc).

**General Education Core Curriculum:**

The Texas Higher Education Coordinating Board has identified six core learning objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.

By enrolling in MTH 143 you are also enrolling in a Core Curriculum Course that fulfills the Empirical and Qualitative Skills requirement. You will see this course on your D2L list.

At one point during the semester, you will receive an assignment that fulfills both the requirements of this course and the needs of Stephen F. Austin State University’s Core Curriculum Assessment Plan with the Texas Higher Education Coordinating Board. When you complete this one assignment, you need to upload the assignment to both your standard course dropbox determined by your Instructor and the “Core Curriculum” dropbox. The Core Curriculum dropbox will be identified by the Objective for which work is being collected. (Examples: Critical Thinking, Teamwork, Social Responsibility Empirical & Quantitative Skills, Personal Responsibility, Communication Skills-Written, Communication Skills-Written & Visual, and Communication Skills- Oral & Visual.) Please note that this only applies to the approved assignment. All other assignments should be submitted according to regular class operations.

When you complete the assignment mentioned above, you will upload the assignment to both the MTH 143 dropbox and the Empirical and Qualitative Skills dropbox.

Please note that this only applies to the specific assignment listed in the matrix below. All other assignments should be submitted according to regular class operations.

If you have any questions, please see your instructor, or contact the at Office of Student Learning and Institutional Assessment at (936) 468-1130.

The chart below indicates the core objectives addressed by this course, the assignment(s) that will be used to assess the objectives in this course and uploaded to the D2L Empirical and Qualitative Skills dropbox this semester, and the date the assignment(s) should be uploaded to the D2L Empirical and Qualitative Skills dropbox. Not every assignment will be submitted for core assessment every semester. Your instructor will notify you which assignment(s) must be submitted for assessment in the D2L Empirical and Qualitative Skills dropbox.
<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>Course Assignment Title</th>
<th>Date Due in D2L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking Skills</td>
<td>To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.</td>
<td>NA</td>
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<td>To include effective development, interpretation and expression of ideas though written, oral, and visual communication.</td>
<td>NA</td>
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<td>Empirical and Quantitative Skills</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
<td>NA</td>
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</table>

No assignment will be collected for this course during this semester.

Acceptable Student Behavior:
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Students with Disabilities:
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Academic Integrity (A-9.1):
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54):
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.