Name: Mrs. Angela Dixon  
Department: Mathematics and Statistics  
Phone: 936.468.1827  
Email: westal1@sfasu.edu  
Office: Math Bldg Room 337  

Office Hours:  

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<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tr>
<td>11-12</td>
<td>12:15-2:15</td>
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Class meeting time and place:  
Section 1 – MWF 9:00-9:50am – Math Bldg Room 202  
Section 2- MWF 10:00-10:50am - Math Bldg Room 202

Text and Materials:  
The textbook is *Mathematics with Applications in the Management, Natural, and Social Sciences*, 11th Edition, by Lial, et al. Chapters 1 through 7 will be covered in this course.

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 for this class. Graphing calculators are not allowed. Also, the calculator function of a cell phone will not be permitted during tests or in-class quizzes.

Recommendations: TI-30XS Multiview, TI-30X IIS, or TI-34 Multiview

**Course description:** Mathematical functions and graphs, linear systems of equations, matrices, linear programming, mathematics of finance; 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

**Course calendar/outline:**  

- **Functions**[CO: 1,2,3]  
  - Linear Functions  
  - Quadratic Functions  
    - Maxima and Minima  
  - Logarithmic Functions  
    - Solutions of logarithmic equations  
  - Applications (e.g. break-even analysis, supply and demand)

- **Matrices** [CO: 1,2,3]  
  - Operations of Matrices  
  - Gauss-Jordan Elimination  
  - Inverse of Square Matrices  
  - Applications (e.g. systems of equations)

- **Linear Programming** [CO: 1,2,3]  
  - Graphical Method  
  - Simplex Method  
    - Maximization  
    - Duality and Minimization  
    - Mixed Constraints (Optional)

- **Mathematics of Finance**[CO: 1,2,3]  
  - Simple Interest

**Approximate time spent**  

- Functions 30%  
- Matrices 20%  
- Linear Programming 25%  
- Mathematics of Finance 20%
Grading Policy:

Your final grade will be determined as follows:

- **20% Daily Average**
- **60% Tests (3 @ 20% each)**
- **20% Comprehensive Final Exam**
- **100% Final Course Grade**

Grades will be assigned based on the following scale:

- 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. (10% Homework/10% Quizzes). This will include in-class activities, worksheets, quizzes, homework assignments, etc. In-class activities, worksheets, and quizzes cannot be made up. Homework assignments will not be accepted late. However, I will drop one or two of the daily grades at the end of the semester.

Online homework/quizzes will be **DUE EVERY WEDNESDAY!!!**
Course Calendar:  
See Below.

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 peer tutoring and the Math Walk-in Table. The hours for the Walk-in Table are 1pm to 8pm Monday through Thursday as well as 4pm to 8pm on Sundays. Sign-ups for weekly tutoring/weekly appointments begin soon. It is a first-come, first-serve basis so you may want to register early. 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, https://library.sfasu.edu/aarc/ . Go to the link for Weekly Appointments Request and fill out the request form for a weekly tutor.

Academic Integrity (Policy 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.

The penalty for a student found cheating on any part of an assignment, quiz, or exam in this class will range from a grade of zero on the work to a grade of F in the course, and may result in additional, more severe disciplinary measures. A student who allows another to copy his work and the student copying the work are both guilty of cheating. Do your own work. Do not show your completed work to others. Do not allow others to copy your work.

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.

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.

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 http://www.sfasu.edu/policies/student_conduct_code.asp). 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.

**Student Learning Outcomes (SLO):** 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]

There are no specific program learning outcomes for this major addressed in this course. It is a general education core curriculum course and/or a service course.

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<td>Week 1</td>
<td>Syllabus</td>
<td>Section 1.6 First-Degree Equations</td>
<td>Section1.7 Quadratic Equations</td>
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<td>Week 2</td>
<td>Section 2.1 Graphs</td>
<td>Section 2.2 Equations of Lines</td>
<td>Section 2.4 Linear Inequalities</td>
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<td>Week 3</td>
<td>Section 3.1 Functions</td>
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<td>Section 3.2 Graphs of Functions</td>
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<td>Week 4</td>
<td>Section 3.3 Applications of Linear Functions</td>
<td>Exam 1 Review</td>
<td>Exam 1</td>
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<td>Week 5</td>
<td>Section 3.4 Quadratic Functions/Section 3.5 Polynomial Functions</td>
<td>Section 3.6 Rational Functions</td>
<td>Section4.1 Exponential Functions</td>
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<td>Week 6</td>
<td>Section 4.2 Applications of Exponential Functions</td>
<td>Section 4.3 Logarithms</td>
<td>Section4.4 Logarithmic and Exponential Equations</td>
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<td>Week 7</td>
<td>Section6.1 System of Two Linear Equations</td>
<td>Section 6.2 Larger Systems of Equations</td>
<td>Section 6.2 Larger Systems of Equations Cont.</td>
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<td>Week 8</td>
<td>Section 6.3 Applications of Systems of Equations</td>
<td>Exam 2 Review</td>
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<td>Week 9</td>
<td>Section6.4 Basic Matrix Operations/Section 6.5 Matrix Products and Inverses</td>
<td>Section6.5 Matrix Products and Inverses Cont.</td>
<td>Section 6.6 Applications of Inverses</td>
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<td>Week 10</td>
<td>Section 7.1 Graphing Linear Inequalities in Two Variables</td>
<td>Section 7.2 Linear Programming: The Graphical Method</td>
<td>Section 7.2 Cont.</td>
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<td>Week 11</td>
<td>Section 7.3 Applications of Linear Programming</td>
<td>Section 7.4 Simplex Method:Maximization</td>
<td>Section 7.4 Cont.</td>
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<td>Week 12</td>
<td>Section 7.5 Maximization Applications</td>
<td>Exam 3 Review</td>
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<td>Week 13</td>
<td>Thanksgiving Holiday-No Class!!!</td>
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<td>Week 14</td>
<td>Section5.1Simple Interest and Discount/Section 5.2 Compound Interest</td>
<td>Section 5.3Annuities, Future Value, and Sinking Funds</td>
<td>Section 5.4 Present Value and Amortization</td>
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<td>Week 15</td>
<td>Section 5.4 Cont./Review</td>
<td>Final Review</td>
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<td>Week 16</td>
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MyMathLab Sign In Instructions
What You Need to Enroll in your Instructor’s Online Course

- **A Course ID:** ______________________
  
  Section 1, 9:00 class: (dixon29884),
  Section 2, 10:00 class: (dixon35498),

- **A valid email address that you check regularly**
  
  This address will be used to confirm your registration and for other communication about the course. Your instructor will also use this email address to communicate with you.

- **A student access code** (Or, you can pay with a credit card or a PayPal account.)
  
  This pre-paid code is printed inside the Student Access Code Card. The code card may be packaged with your new textbook or it may be available for purchase separately from your school’s bookstore.

**To Register and Sign in to Your Instructor’s Course the First Time**

- Go to [www.mymathlab.com](http://www.mymathlab.com)
- Click **Student** under Register.
- Enter your Course ID and click **Continue**.
- Verify the course information.
- If you have used MyMathLab in other courses you can enter your username and password, and click **Sign In**.
  - If you don’t have an account, click **Create**
  - Complete your account set up by entering your name, email address, a username and password, and any other required information. (WRITE THIS DOWN AND SAVE IT)
- Click **Create Account**. You now have a Pearson Account.
- Paying for your course access.
  - If you have already purchased an access code, click **Access Code** , enter the code and click **Finish**.
  - If using a credit card or PayPal, click the button for the access you want to purchase, provide payment account information and verify your order.
  - You also can use the “Temporary Trial Access” which will give you temporary access to the course until you are able to purchase the access code (usually lasts 14 days). Remember to write down the email address/username/password you use for the trial access or you may lose all work done during your trial.
- Print the Confirmation & Summary

**You now have access to your instructor’s online course.**

Click **Go To Your Course**, and then in the left panel, click the course name to start your work.