MATH 1324 Syllabus
Eastfield College

Instructor Information
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Course Information
Course Title: Mathematics for Business and Social Sciences
Course Number: MATH 1324
Section Number: 42490
Semester/Year: Wintermester 2019
Credit Hours: 3
Class Meeting Time/Location: INET
Certification Date: 12/18/2019
Last Day to Withdraw: 01/06/2020

Course Prerequisites
College level ready in Mathematics algebra-based level.

Course Description
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.
Student Learning Outcomes

Upon successful completion of this course, students will:

1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
3. Apply basic matrix operations, including linear programming methods, to solve application problems.
4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
5. Apply matrix skills and probability analyses to model applications to solve real-world problems.

Texas Core Objectives

The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. Communication Skills - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. Personal Responsibility - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. Social Responsibility - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Course Materials

2. MyMathLab access code required. ISBN 9780134880464
   An ebook is included with your MML access. Free trial will be available for temporary access to MML the first day of class.
3. Graphing calculator required. Students may check out a TI-84 calculator from the Reserve Desk in the Eastfield library for the day. TI-84 calculators are also available during testing at the Eastfield testing center. Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer. Be sure to check the ISBN before purchasing any textbook or access code.

**Graded Work**

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

**Summary of Graded Work**

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Quiz</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

**TOTAL: 100%**

**Final Grade**

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-59%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Description of Graded Work**

**Homework:** All homework assignments will be posted on MyMathLab. You will find a MyMathLab link on eCampus the first day of class. When accessing an assignment, students will have help tools such as "View an Example" and "Help Me Solve This" to assist with the homework. Students can also click "Ask My Instructor" to send instructor questions - all I need is a quick description stating where you are stuck in the textbox that will appear so I can help you proceed. Students will also have the textbook available in electronic form with videos in your help tools for your convenience.
Please note that you can attempt the homework problems as many times as needed. MyMathLab initially gives three tries to answer a problem correctly, and if the answer is wrong after the third try, MyMathLab will display the correct answer and allow you to attempt a similar exercise for full credit. Feel free to click the "Similar Exercise" button as many times as you need to receive full credit.

The chapter videos, handouts, and powerpoints on MyMathLab are optional, but are available for your reference. You can find these helpful resources in MyMathLab under "Multimedia Library."

**Quizzes:** There will be 4 quizzes posted on MyMathLab throughout the semester. These quizzes will be very similar to the homework assignments, however there are key differences students should be aware of:

Please note that tools such as "View an Example" and other similar help tools will be unavailable. You will still have access to the textbook and videos so feel free to use available resources to complete your quizzes. Review the problems carefully before submitting your answers. **You are allowed to take a quiz up to 3 times.**

**Midterm & Final Exam:** All tests, including the final exam, will be administered either (a) on campus at an approved DCCCD testing location, or (b) online through ProctorU. Students may request their preferred method of testing. Instructor will contact class within the first week so students can request their preferred method through a survey that will be posted on eCampus. Exam windows will be created for students' convenience. Midterm and final exam must be taken during exam windows (no exceptions). Please consider the following before submitting your request:

**Face-to-Face Testing at Approved DCCCD Location:** Approved testing centers include the following main campuses: BHC, CVC, EFC, ELC, MVC, & NLC. If you choose to test at an approved testing center, you can take your exam on a walk-in basis. Please note that the testing centers serve students based on seating availability. Plan accordingly as some locations are closed on weekends and holidays. See testing center hours of operation here: [https://www.dcccd.edu/services/academic-support/testing-centers/pages/default.aspx](https://www.dcccd.edu/services/academic-support/testing-centers/pages/default.aspx)

There’s no fee for testing at a DCCCD testing center. Please have your ID ready along with your student ID number, course information, and eCampus login so you can log in and take your test when you are seated. DCCCD testing centers generally accept any photo identification for your ID (student ID card / driver’s license / passport / state ID / military ID / etc.), however the district requires that students carry their student ID card at all times.
Online Testing Through ProctorU: If you choose to test at home, create a ProctorU account here: https://go.proctoru.com/students/users/new. Be sure to choose Eastfield College as your home institution. Make sure you test your computer and connection in advance in order to be online ready on test day. You can test your equipment using the following link:
https://go.proctoru.com/students/system-metrics/new

Please note that ProctorU will charge a fee (~ $20 - $25) for online testing. ProctorU requires at least 72-hours notice when scheduling a test. If you schedule inside of 72 hours, you may see an additional fee for late scheduling. If you choose this method of testing, you may begin scheduling a future reservation for the midterm and final exam after the first day of class. Schedule your tests three days out in order to avoid any unnecessary fees.

On the ProctorU reservation page (https://go.proctoru.com/students/reservations), schedule a new session and locate the exams for this course (MATH 13XX - Exam X - Semester 20XX - Joe Coreas). Pick a convenient time and date for testing within the exam window. Please have your ID ready along with your eCampus info so you may log in and take your test. ProctorU generally accepts any photo identification (student ID card / driver's license / passport / state ID / military ID / etc.).

Students are responsible for ensuring all equipment will be fully functional for the duration of the test.

Attendance
You are expected to regularly engage in course content. Students have the responsibility to consult with the instructor when an absence occurs. Blackboard Collaborate (online video conferencing) available upon request. Please contact instructor to make an appointment.

Late Work Policy
You are allowed to turn in late homework & quiz assignments. Problems submitted after the due date are subject to a 10% penalty. Once we reach a major test, all previous assignments will become unavailable.

Standard of Conduct/Classroom Etiquette
No food, drinks or tobacco products are allowed in Eastfield College classrooms. However, if your class is in a non-lab classroom, your instructor may allow food or drink.

Additional Resources
Tutoring Services (https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx) are provided for Mathematics and Developmental Mathematics in the Eastfield library, Building L, Room 200. Students are encouraged to
take advantage of this service for additional help in their course work. Visit the link above or call 972-860-7174 for more information on tutors, hours of operation and policies.

**Institutional Policies**

Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

[Eastfield Institutional Policies](http://www.eastfieldcollege.edu/syllabipolicies)

### Course Content

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Section</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch. 1</td>
<td>1.1, 1.2</td>
<td>Linear Equations and Inequalities, Graphs of lines.</td>
</tr>
<tr>
<td>Ch. 2</td>
<td>2.1-2.6 (All Sections)</td>
<td>Elementary, Quadratic, Exponential and Logarithmic Functions.</td>
</tr>
<tr>
<td>Ch. 3</td>
<td>3.1-3.4 (All Sections)</td>
<td>Simple interest, Compound interest, Future and Present value problems.</td>
</tr>
<tr>
<td>Ch. 4</td>
<td>4.1 – 4.6</td>
<td>Systems of linear equations, Matrix operations, Inverse of a Matrix and Matrix Equations.</td>
</tr>
<tr>
<td>Ch. 5</td>
<td>5.1 - 5.3</td>
<td>Inequalities in two variables, systems of inequalities and Linear Programming.</td>
</tr>
<tr>
<td>Ch. 6 (optional)</td>
<td>6.1, 6.2</td>
<td>Simplex Method.</td>
</tr>
<tr>
<td>Ch. 7</td>
<td>7.2 – 7.4</td>
<td>Sets, Counting Principle, Permutations and Combinations.</td>
</tr>
<tr>
<td>Ch. 8</td>
<td>8.1 – 8.3</td>
<td>Simple probability, Events and Conditional probability; Intersection and Independence.</td>
</tr>
</tbody>
</table>

Revised 10/2019

The guideline in this syllabus may be changed, deleted, or amended any time by the instructor. The attached course outline is intended as an aid in helping students know their responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Refer to the syllabus posted on eCampus for the latest revision.