MATH 1324 Syllabus
Eastfield College

Instructor Information
Name: Ahmad Abdallah
DCCCD Email: ahmadabdallah@dcccd.edu
Office Phone: 972-391-1085
Office Location: C276
Office Hours: NA due to COVID-19
Division Office and Phone:  STEM Division, C-Building, Room 202 | 972-860-7297

Course Information
Course Title: Mathematics for Business and Social Sciences
Course Number: MATH 1324
Section Number: 40415
Semester/Year: Spring 2020
Credit Hours: 3
Class Meeting Time/Location: INET
Certification Date: 04/03/2020
Last Day to Withdraw: 05/04/2020

Course Prerequisites
College level ready in Mathematics algebra-based level / DMAT-0315

Course Co-Requisite
This is a corequisite course and requires continuous concurrent enrollment with DMAT-0315
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

**Required Course Materials**

2. MyMathLab access code required. ISBN 9780134880464
   An ebook is included with your MML access.
3. **YOU WILL NOT NEED TO PURCHASE ACCESS TO MYMATHLAB AND WILL USE THE SAME ACCESS FOR MATH 1324 (SAME MML COURSE).**
4. A graphing calculator may be needed for some assignments. 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.

**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>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>MML Homework</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>MML Quizes</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>MML Online Tests</td>
<td>4 @ 6.25% each</td>
<td>25%</td>
</tr>
<tr>
<td>Core Artifact Assignment</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Proctored MidTerm Exam</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Proctored Final Exam</td>
<td>25%</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

1. All homework, quizzes and online tests will be submitted through MyMathLab (MML).
2. You are required to take two proctored exams (the midterm and the final) administered on campus at the EFC Testing Center. **Because of the unfortunate circumstances regarding Covid-19, both proctored exams will be taken using online proctoring services (ProctorU / Respondus) and will not be administered at Eastfield testing center. If circumstances changed and campus opened before the due dates of these exams then I reserve the right to adjust this statement accordingly.**

3. Each homework, quiz and online test has a specific due date that is **highly enforced.**
   a. MML assignments (HW, Quizzes and online tests) can be turned in late. However, there is a 10% penalty deduction for any assignment turned in pass the specified deadline.
   b. The final submission deadline for all late MML assignments is the day before the final exam is due.
   c. You may work ahead as much as you want.
4. The quizzes are considered your reviews for each online test and count for 5% of your overall score.
   a. Each quiz covers two to three sections as each online test covers those two chapters that you reviewed on.
   b. You have two attempts for each quiz.
      i. Both attempts are due on the date specified on the course pacing calendar.
   c. To access the quizzes you must score at least 75% on the previous HW assignments.
5. Each online test covers one or two chapters and will account for a total of 25% of your overall score.
   a. You have a total of 4 online tests (MML)
   b. You will have two attempts for each online test and have 120-150 minutes (The amount of minutes depends on the length of the test and is decided by the professor) for each attempt of each test.
i. Both attempts are due on the date specified on the course pacing calendar.

   c. I will take the highest score of the two attempts (if you did both attempts)

   d. If you are satisfied with grade of the first attempt of that test, you do not have to do the other attempt.

   e. Each online test (the first and second attempt) has a specific deadline and CAN be turned in late with 10% deduction pass the due date. If the deadline of the online test is missed, a grade of a zero will be placed in the gradebook and you will miss your first attempt.

6. The Midterm Exam will cover concepts from Tests 1 & 2. This counts as 25% of your overall score.

   a. Please complete the midterm review to prepare for your midterm exam. This review counts as a HW grade.

   b. You will only have 1 attempt for the midterm exam.

   c. The midterm exam must be taken by the specified deadline. If the deadline of the midterm is missed, a grade of a zero will be placed in the gradebook.

   d. The midterm exam must be proctored.

7. The Final Exam covers concepts from Tests 3 & 4. This counts as 25% of your overall score. The final must be taken by May 13th, 2020.

   a. Please complete the final exam review to prepare for your final exam. This review counts as a HW grade.

   b. You will only have 1 attempt for the final exam.

   c. The final exam must be taken by the specified deadline. If the deadline of the final exam is missed, a grade of a zero will be placed in the gradebook.

   d. The Final Exam must be proctored.

8. **Core Artifact Assignment:**

This assignment will be emailed to you and must be fully completed and sent back to receive points. The assignment is designed to test your essential knowledge and skills (Texas Core Objectives)

**Instructional Components:**

**Step 1:** Watch a video

- Video lecture introduces each section of each chapter
- Must be accessed before each homework assignment
- Can be accessed after due date
- Taking notes while watching the video is highly recommended.
- Will not count as a grade.

**Step 2:** Powerpoint Slides

- Ppt lecture slides introduces each section of each chapter and they include a wealth of informations and examples.
- Highly encouraged before each homework assignment
- Can be accessed anytime
- Taking notes while watching the slides is highly recommended.
- Can be accessed on MyMathLab right tab.
Step 3: Homework
- Consists of problems from each section
- Problem can be repeated until mastered - select “Similar Exercise” after each 4th incorrect attempt
- 75% mastery required to proceed to next topic and be able to access related quizzes.
- Can be accessed after due date
- Late problems penalized 10%

Step 4: Quizzes/Reviews
- Consists of problems from the previous two or three homework problems.
- Must be completed before each online test
- Can be taken up to two times.
- In order to access the review, the student must have received 75% on each homework assignment that the review covers
- Late submission is allowed with 10% deduction after due date.
- Midterm and final exam reviews are to be taken before taking those proctored exams

Step 5: Online Tests
- Assesses student understanding of the covered concepts
- Can be taken up to two times
- Only the highest score of the two attempts will be put into the gradebook
- Late submission is allowed with 10% deduction after due date

Attendance and Your Final Grade
NA

Late Work Policy
Late work for HW assignments and exams will be accepted until the last day of this course with a 10% penalty deduction after the due date.

Standard of Conduct/Classroom Etiquette
No food, drinks or tabacco 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. (Tutoring services at Eastfield Library will be suspended until further notice due to COVID-19)

Other Course Policies

SYLLABUS REVISION:
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 you know your responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Any changes that are made to the class policies or course outline will be announced via email.

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>Chapter</td>
<td>Section</td>
<td>Topic</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>--------------------------------------------------------</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>