Term: Fall 2019 8-Week Course  
Course: MATH-1324-48310  
Course Dates: 10/22/2019-12/12/2019  
Class Location: C142

<table>
<thead>
<tr>
<th>INSTRUCTOR:</th>
<th>Alysmarie Hodges</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE:</td>
<td>C236 (Adjunct Faculty Teaching and Learning Center)</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>972-391-1047</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:alyshodges@dcccd.edu">alyshodges@dcccd.edu</a></td>
</tr>
</tbody>
</table>

| STEM Division:   | C-Building, Room 202 | 972-860-7297 |

| Course Drop Date: | November 27, 2019 |
| Certification Date: | October 28, 2019 |

Disclaimer: The instructor reserves the right to amend this syllabus as necessary.

Institutional Policies: Eastfield College Institutional Policies
(https://www.eastfieldcollege.edu/au/fastfacts/legal/pages/policies-for-syllabi.aspx)

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. (3 Lec.)

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

Textbook and Other Course Materials:
- My Math Lab - Microsoft Windows 7 and 8 users should use one of the following browsers with MyMathLab courses--Chrome, Firefox or Internet Explorer 10 and 9. Click here for other system requirements.

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.

Core Objectives:
MATH 1324 develops the following Core Objectives:

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

Core Objective Development Statements:
MATH 1324 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of various functions to management, economics, and business.

Grading Policy:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>18.5%</td>
<td>Homework</td>
</tr>
<tr>
<td>18.5%</td>
<td>Quizzes</td>
</tr>
<tr>
<td>38%</td>
<td>Exams</td>
</tr>
<tr>
<td>25%</td>
<td>Final Exam</td>
</tr>
<tr>
<td>100 %</td>
<td></td>
</tr>
</tbody>
</table>

Grading Rationale:

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

Policy on Missed Tests and Assignments: NO MAKE-UP EXAMS WILL BE GIVEN. An exam may be taken prior to the scheduled date. I request a week’s notice for this accommodation via email. In the event of a schedule conflict with a university function the student must take the test early. If a student does not take a scheduled exam, a zero will be recorded for that exam and a notice may be sent through the registrar’s office.

Homework: Homework assignments for the semester are set up through eCampus and facilitated by MyMathLab. Homework assignments are to be completed in eCampus, the due dates and times are explicitly stated on the MyMathLab homework section. Pay very close attention to the due dates. You may re-work homework assignments until you earn the grade you want. NO LATE HOMEWORK will be accepted for any reason whatsoever. That means due dates will NOT be extended for any reason. A grade of zero will be assigned to any homework assignment not completed on-line by the due date and time. NO EXCEPTIONS. At the end of the semester, four (4) of your lowest homework grades (including zeros) will be dropped from the calculation of your homework grades average. Save these drop grades for illnesses and/or unforeseen emergency situations.
On-line Chapter Quizzes:
You must take on-line chapter quizzes by the posted due date and time. You may take the quizzes (algorithmically generated) up to ten (10) times, the highest score of the ten attempts permitted per quiz will be counted.

Exams:
Count your points on exams to be sure the totals are correct. Keep a record of all your scores. If you think that your work has been graded incorrectly, ask for a re-grade immediately after receiving the exam back. Your entire exam will then be re-graded, and you may lose points or gain points on any problem, including but not limited to the problem you ask about. Note that exams are routinely photocopied before they are handed back. You have 7 days from the time an exam is returned to contest your exam grade (regardless of your attendance in class when the exam is returned). Two in-class exams are planned for this semester.

Final Exam:
A comprehensive, departmental final examination, which will represent at least 25% of the class grade, will be administered in all Math 1314 classes.

Attendance Policy:
You are expected to regularly attend all classes in which you are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

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 for food or drink.

Appropriate and collegiate behavior is expected of all students taking this course. Arrive to class promptly and do not leave until the scheduled ending time of the class. If you must arrive late or leave early, please do so as discretely as possible and take a seat near the door. Electronic Devices including, but not limited to cell phones of all types, IPODS, tablets and laptops (not being used for class purposes), and all other related devices must be stored out of sight and turned off while in the classroom. Violation of this rule may be expulsion from the class. Do not read newspaper or work on unrelated assignments during class. I prefer that you not eat “noisy” foods during class. Remember, we are all adults and clean up after yourself.

ADDITIONAL RESOURCES
The Math Spot (https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx) provides tutoring in Mathematics and Developmental Mathematics. Students are encouraged to take advantage of this service for additional help in their course work. The Math Spot is located in room L200, and the phone number is 972-860-7174. Visit the link above for more information on tutors, hours of operation and policies.
### COURSE OUTLINE:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Sections</th>
<th>Topics</th>
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<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>
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<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>
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</table>

### Tentative Reading Calendar:

<table>
<thead>
<tr>
<th>Chapter and Section</th>
<th>Suggested Reading Date</th>
<th>In-Class Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>3/26</td>
<td>3/28</td>
</tr>
<tr>
<td>1.2, 2.1, 2.2</td>
<td>3/31</td>
<td>4/2</td>
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<tr>
<td>2.3, 2.4</td>
<td>4/2</td>
<td>4/4</td>
</tr>
<tr>
<td>2.5, 2.6, 3.1</td>
<td>4/7</td>
<td>4/9</td>
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<tr>
<td>3.2, 3.3, 3.4</td>
<td>4/9</td>
<td>4/11</td>
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<tr>
<td>Exam 1</td>
<td></td>
<td>4/16</td>
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<tr>
<td>4.1, 4.2, 4.3</td>
<td>4/16</td>
<td>4/18</td>
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<tr>
<td>4.4, 4.5</td>
<td>4/21</td>
<td>4/23</td>
</tr>
<tr>
<td>4.6, 5.1</td>
<td>4/23</td>
<td>4/25</td>
</tr>
<tr>
<td>5.2, 5.3</td>
<td>4/28</td>
<td>4/30</td>
</tr>
<tr>
<td>7.2, 7.3, 7.4</td>
<td>4/30</td>
<td>5/2</td>
</tr>
<tr>
<td>8.1, 8.2, 8.3</td>
<td>5/5</td>
<td>5/7</td>
</tr>
<tr>
<td>Exam 2</td>
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<td>5/9</td>
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<tr>
<td>Review</td>
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<td>5/14</td>
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<tr>
<td>Final Exam</td>
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Revised: 3/9/19