Term: Fall 2019, 8-Week Course  
Course: DMAT-0315-47015  
Course Dates: 8/26/2019 – 10/16/2019  
Class Location: C-104 & C-314

| Instructor: | Mrs. Aletta Cabrera |
| Phone: | (972) 391-1047 |
| Email: | alettacabrera@dcccd.edu |
| Office & Office Hours: | C-236  
By appointment. |

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

Course Drop Date: 10/3/2019

Certification Date: 8/31/2019

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: 
This course is a study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. (3 Lec.)

Prerequisite: 
An appropriate assessment test score or DMAT 0305.

Corequisite/Concurrent: 
This is a corequisite course and requires continuous concurrent enrollment with MATH 1314.

Textbook and Other Course Materials (YOU WILL PURCHASE COURSE MATERIALS IN DMAT 0315 AND CAN USE THESE MATERIALS IN MATH 1314):
  Textbook is OPTIONAL.
- **MyMathLab**: (YOU WILL PURCHASE ACCESS TO MYMATHLAB IN DMAT 0315 AND CAN USE THE SAME CODE FOR MATH 1314). Please note that in this section of DMAT 0315, MyMathLab access is required. An ebook is included with your account. MyMathLab access is not included with the purchase of a used book, and
may not be included with the purchase of a new book. Therefore, use caution when purchasing your course materials. Microsoft Windows 7 and 8 users should use one of the following browsers with MyMathLab courses—Chrome, Firefox or Internet Explorer 10 and 9. For other system requirements go to http://www.pearsonmylabandmastering.com/northamerica/system-requirements/

- **Calculator:** Students are required to have access to a TI-83 or TI-84 calculator. Graphing calculators may not be allowed during some examinations.

**MyMathLab Technical Support:**

- It is the responsibility of the student to contact MyMathLab Technical Support to resolve any technical issues. Please visit the following website for assistance:
  - https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/technical-support/index.html

**Student Learning Outcomes:**

Upon successful completion of this course, students will:

1. Define, represent, and perform operations on real and complex numbers.
2. Recognize, understand, and analyze features of a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
4. Identify and solve absolute value, polynomial, radical, and rational equations.
5. Identify and solve absolute value and linear inequalities.
7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines

**Grading Policy:**

Your grade will be determined as indicated below.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>5%</td>
<td>Participation and Attendance</td>
</tr>
<tr>
<td>20%</td>
<td>Homework (In MyMathLab)</td>
</tr>
<tr>
<td>20%</td>
<td>Module Tests (In MyMathLab)</td>
</tr>
<tr>
<td>25%</td>
<td>Midterm Exam (In class; covers chapters R – 2)</td>
</tr>
<tr>
<td>30%</td>
<td>Final Exam (In class; comprehensive, covers Modules 1 – 4)</td>
</tr>
<tr>
<td>100 %</td>
<td></td>
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</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>F</td>
<td>0 – 69 %</td>
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</tbody>
</table>

**Final Examination:** A comprehensive, departmental final examination, which will represent at least 25% of the class grade, will be administered in all DMAT 0315 classes.

**Instructional Components:**

The course will follow the format below.

1. **Homework** – Consists of problems from each section
   - Problem can be repeated until mastered – select “Similar Exercise” after each 3rd incorrect attempt
   - All “Help” buttons available
   - Can be accessed after due date
   - Late problems penalized 10%
Must be in “Homework,” not “Review” mode to save progress
Problems saved individually
80% mastery required to proceed to next topic

2. Test Review (optional) – Helps prepare students for module test
   • Score omitted from student grades
   • Can be accessed after due date

3. Test – Assesses student understanding of chapter
   • Completed outside of class
   • Reviewed by student only immediately after submission
   • Late submission not allowed

4. Test Remediation (if necessary) – Practice skills not mastered
   • Contains only problems not mastered in chapter test
   • Each problem not mastered creates 2 similar remediation problems
   • Score omitted from student grades
   • 80% mastery required to access 2nd test attempt

5. 2nd Test Attempt (if necessary) – Retest all chapter concepts
   • Completed outside of class
   • Reviewed by student only immediately following submission
   • Lower Score (1st or 2nd attempt) omitted following 2nd attempt

Midterm and Final Exam:
After you have mastered chapters R – 2, you will be prepared to take the midterm exam. The midterm exam will be administered in class on the date indicated on the schedule. If you have not completed any homework or tests from chapters R – 2 by the date indicated on the schedule, you will be given a grade of zero on those assignments. You can increase your grade on these past due assignments following the late submission guidelines described above. **Late midterm exam submissions are not accepted under any circumstance.**

After you’ve mastered the remaining course chapters, you will be prepared to take your comprehensive final exam. Since the final exam is comprehensive, you may not take the final exam until you’ve completed all chapter coursework including homework and tests. If you have not completed homework or tests for chapters 3, 10, 4 and 5 by the final exam, you will be given a final grade of zero on those past due assignments. **Late final exam submissions are not accepted under any circumstance.**

Midterm and Final Exam Policies:
• Bring instructor approved calculator, green scantron, pencil and eraser to class
• Written exam, not computer based
• Must be completed independently
• No remediation option
• One attempt for each

Policy on Missed Tests and Assignments:
Late homework assignments will be accepted with a penalty of 10%. Late exam submissions are not accepted under any circumstance.

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. Per the grading policy above, attendance will be counted in your overall course grade.

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. Cell phones must be silenced at all time while in the classroom. Laptops will be allowed at the instructor’s discretion.
Additional Resources:
The Math Tutoring Center provides FREE TUTORING to current Eastfield College students enrolled in a Mathematics or Developmental Mathematics course. Students are encouraged to take advantage of this free resource for additional help in their course work. Please visit the Math Tutoring Center located in the Learning Commons in L200, check eastfieldcollege.edu/tutoring, or call 972-860-7174 for more information. In addition, TI-84 calculators are available for daily check-out in the library. Click on the following website for more information: https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx

Course Outline:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Topics</th>
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<tbody>
<tr>
<td>R1 – R7; 1.1 – 1.2, 1.4-1.6</td>
<td>The Set of Real Numbers; Operations with Real Numbers; Exponential Notation and Order of Operations; Introduction to Algebraic Expressions; Equivalent Algebraic Expressions; Simplifying Algebraic Expressions; Properties of Exponents and Scientific Notation; Solving Equations; Formulas and Applications; Sets; Inequalities; Interval Notation; Intersections and Unions; Compound Inequalities; Absolute-Value Equations and Inequalities</td>
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<tr>
<td>2.1 – 2.7; 3.1 – 3.4, 3.7</td>
<td>Graphs of Equations and Functions; Finding Domain and Range; The Algebra of Functions; Linear Functions: Graphs and Slope; Finding Equations of Lines; Applications; Systems of Equations in Two Variables; Solving systems of Equations by Substitution and Elimination; Applied Problems: Two Equations; Systems of Inequalities in Two variables</td>
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<tr>
<td>10.1 – 10.4</td>
<td>Matrices, Matrix Operations, Inverse of Matrices, Determinants and Cramer’s Rule</td>
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<tr>
<td>4.1 – 4.6, 4.8; 5.1 – 5.5</td>
<td>Introduction to Polynomials and Polynomial Functions; Multiplication of Polynomials; Introduction to Factoring; Factoring Trinomials and Special Factoring; Applications of Polynomial Equations and Functions: The Principle of Zero Product; Rational Expressions and Functions: Multiplying, Dividing, and Simplifying; LCMs, LCDs, Addition, and Subtraction of rational expressions; Division of Polynomials; Complex Rational Expressions; Solving Rational Equations</td>
</tr>
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Revised: 6/21/19