Term: Fall 2019 - 8 Week Course  
Course: DMAT-0315-47016  
Course Dates: 8/27/2019 – 10/15/2019  
Class Location: room C-314 Tue/Thu 8:00 – 10:50

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Kathy Kirchner</th>
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<tbody>
<tr>
<td>Phone:</td>
<td>972-391-1047</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:kathleenkirchner@dcccd.edu">kathleenkirchner@dcccd.edu</a></td>
</tr>
<tr>
<td>Office &amp; Office Hours:</td>
<td>C- 236 (Adjunct Office) Tue/Thu 11-12 (by appointment only)</td>
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</tbody>
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STEM Division: C-Building, Room 202 | 972-860-7297

Course Drop Date: Thursday, Oct 3, 2019
Certification Date: Saturday, August 31, 2019
Disclaimer: The instructor reserves the right to amend this syllabus as necessary.

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 1314.48016.

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:**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>15%</td>
<td>Homework in MyMathLab</td>
</tr>
<tr>
<td>20%</td>
<td>Quizzes in MyMathLab</td>
</tr>
<tr>
<td>25%</td>
<td>Modular Tests in MyMathLab</td>
</tr>
<tr>
<td>10%</td>
<td>In Class Activities</td>
</tr>
<tr>
<td>5%</td>
<td>Class Attendance Grade</td>
</tr>
<tr>
<td>25%</td>
<td>Final Exam</td>
</tr>
<tr>
<td>100%</td>
<td>Total Points Possible</td>
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**Mymathlab Homework and Quiz Assignments:** Section homework assignments and section quizzes will be completed using MyMathLab. You need 80% to master homework and 60% to master quizzes.

**Homework Assignments:** All of the section homework problems for the course are to be completed through MyMathLab. Students are responsible for working problems, checking solutions, and asking questions when they arise. Homework consists of problems form each assignment section.

• Problem can be repeated until mastered – select “Similar Exercise”
• All “Help” buttons available
• Must be in “Homework”, not “Review” mode to save progress
• Problems saved individually
• Late homework assignments will be assessed a 10% penalty on problems not done.
• You must master with an 80% or better to move on
QUIZ ASSIGNMENTS: Section quizzes are to be completed through MyMathLab.

- Problem can be repeated until mastered – select “Similar Exercise”.
- “Help” buttons not available.
- Must be in “Homework”, not “Review” mode to save progress
- Problems saved individually.
- Late quiz assignments will be assessed a 10% penalty on problems not done.
- You must master with an 60% or better to move on

MODULAR TESTS: There are 4 modular tests which are taken after the modular review has been mastered with an 80% or better. Each test can be taken 3 times – attempts 2 and 3 require mastery of the remediation assignment. If you do not take the modular test by the due date (1st attempt), you will receive a score of zero and will need to do the remediation assignment instead of the review before taking the test for your 2nd or 3rd attempt. Only the highest score will be kept.

IN CLASS ACTIVITIES: The student will receive a grade for each of the in class group activities. Since these activities will be completed in a group setting, class activities cannot be made up. If you miss a class activity, you will receive a zero for that activity.

FINAL EXAM: A comprehensive, departmental written final examination, which will represent at least 25% of the class grade, will be administered in all dmat 0315 classes. Students will be given 2 hours to complete the comprehensive final exam during class. Students may use their calculator, but not a cellphone. Students will not be allowed to collaborate on the final exam.

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>
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<tr>
<td>F/E</td>
<td>0 – 69%</td>
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“E” GRADE OPTION: You instructor has the option to award a grade of “E” provided certain conditions are met. The “E” is a grade that indicates that the student met all requirements for attendance (3 or fewer absences), at least 3 modules are completed along with the final exam and the grade earned is below C. Even if you meet the above condition, your instructor is not obligated to give you an “E” grade.

Policy on Missed Tests and Assignments: MyMathLab will close at midnight on Monday, 10/14/2019. All work must be completed by this time or zeroes will stand.

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. Attendance will be taken during EACH class. At the end of the course you will receive an attendance grade. If you missed 3 days or less throughout the semester, the attendance grade will be 100. If you missed more than 3 days the attendance grade will be a zero.

Standard of Conduct/Classroom Etiquette:
No food, drinks or tobacco products are allowed in Eastfield College classrooms. Turn off all cell phones BEFORE entering the classroom.

STRATEGIES TO BE SUCCESSFUL:
- Attend every class and ask questions….review class notes frequently
- Keep a Notebook with all homework and class notes to use to study for tests
- Show all work and check your answers
- Read each chapter and come prepared to class each day
- STUDY FOR TESTS and take them by the due date.
To successfully complete this course, you must be diligent. Make sure you set aside a period of time each day that you can work on the material, and do not fall behind. Work ALL the assigned homework problems as a minimum, and more if you feel you have not quite mastered the material. If you have a problem, contact me immediately so that you don’t fall behind. The key to success in this course is doing your work every day!

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>
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<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>
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Revised: 6/21/19