**Term:** (Fall 2019) **MW-Week Course**  
**Course:** DMAT-0315-47012  
**Course Dates:** 8/26/19-10/26/19  
**Class Location:** room # C300 & C314

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Vallery Schmidt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone:</td>
<td>972-391-1047</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:Vallery.schmidt@dcccd.edu">Vallery.schmidt@dcccd.edu</a></td>
</tr>
<tr>
<td>Office &amp; Office Hours:</td>
<td>C236; BY APPOINTMENT</td>
</tr>
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**STEM Division:** C-Building, Room 202 | 972-860-7297

<table>
<thead>
<tr>
<th>Course Drop Date:</th>
<th>8/31/2019</th>
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<tr>
<td>Certification Date:</td>
<td>10/03/2019</td>
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<td>Disclaimer:</td>
<td>The instructor reserves the right to amend this syllabus as necessary.</td>
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**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:**
- Homework 20%
- Attendance 10%
- Exams 50%
- Final 20%

**Grading Rationale:**
The letter grade for the semester is based on the following percentages:
A-90-100% B-80-89% C; 70-79% D; 60-69% F; 0-59%

**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.

**Policy on Missed Tests and Assignments:**
There are no makeup exams given. Assignments can be reopened at the teacher discretion.

**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.

In case of absence, it is the student's responsibility to contact the instructor. Students absent on official school business are entitled to make up coursework missed. In all other cases, the instructor will judge whether the student will be permitted to make up work and will decide on the time and nature of the makeup. However, the student is expressly responsible for any work missed regardless of the cause of the absence. The student must discuss such work with the instructor and should do so immediately on returning to school. Communication between the student and instructor is most important, and it is the student's responsibility to initiate such communication. If students do not appear at the
prearranged time or meet the prescribed deadline for makeup work, they forfeit their rights for further make up of that work.

**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 classroom behavior is required to attend class. All cell phones and other such devices must be put on silent or turned off during class. Phones are a distraction for me and the other students in the class. NOTE: THIS INCLUDES BLUETOOTH AND OTHER DEVICES THAT ARE PLACED IN THE EAR. All people will be treated with respect and I will not allow talking that will disrupt my lectures. If disruptions occur during class lectures, you will be asked to leave class and will earn a zero on any applicable grades for that class period. Serial disrupters will be asked to withdraw from my class. During exams all electronic devices have to be out of sight meaning purse or backpack. These devices include any electronic watches as well.

**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](https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx)

**COURSE OUTLINE:**

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<tr>
<th>Sections</th>
<th>Topics</th>
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<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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<td>10.1 – 10.4</td>
<td>Matrices, Matrix Operations, Inverse of Matrices, Determinants and Cramer’s Rule</td>
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<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; LCDs, LCMs, Addition, and Subtraction of rational expressions; Division of Polynomials; Complex Rational Expressions; Solving Rational Equations</td>
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Revised: 6/21/19