**Term:** (Fall 2019) 8-Week Course (FLEX 2)  
**Course:** MATH 1314-48014  
**Course Dates:** 10/22/19 – 12/12/19  
**Class Location:**  
Classes are Mondays and Wednesdays  
11:00 a.m. – 12:20 p.m. Room C142  
12:30 p.m. – 1:50 p.m. Room C314

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Dr. Alla Kelman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone:</td>
<td>972-860-7067</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:allakelman@dcccd.edu">allakelman@dcccd.edu</a></td>
</tr>
</tbody>
</table>

Instructor will reply to emails within 24-48 hours during week days. Not available on holidays and weekends.

My preferred method of contact is email. Please keep in mind that it is against the law (FERPA) for me to discuss grades with you via phone or email. See me in person if you need to discuss your personal academic progress or grades in this course.

<table>
<thead>
<tr>
<th>Office &amp; Office Hours:</th>
<th>OFFICE:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BUILDING C, ROOM C210</td>
</tr>
</tbody>
</table>

**Office Hours:**  
MW: 9:50 A.M. – 10:50 A.M.  
TTR: 1:00 P.M. – 2:00 P.M.  
During office hours instructor will see students and respond to emails on “first come, first serve” basis.  
If you need to see the instructor outside of office hours please make an appointment. Allow 24-48 hours for scheduling of all appointments.

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

<table>
<thead>
<tr>
<th>Course Drop Date:</th>
<th>11/27/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification Date:</td>
<td>10/28/2019</td>
</tr>
</tbody>
</table>

**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 an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. This course is cross-listed as MATH 1414. The student may register for either MATH 1314 or MATH 1414 but may receive credit for only one of the two. (3 Lec.)

Prerequisite: Required: College level ready in Mathematics algebra-based level.

Corequisite/Concurrent: This is a corequisite course and requires continuous concurrent enrollment with DMAT 0315.

COURSE INTRODUCTION:
In this class the instructor will lecture and guide discussion while students might be working in groups, pairs or individually throughout the semester. Students enrolled in this course are expected to participate by being prepared for every class, by being engaged in group activities, by joining class discussions, by communicating with the class about their understanding of mathematics, and by explaining their work to others. Don’t fall behind.

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/MATH 1314, 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/](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. This calculator may be check out from the Eastfield College library for DAY USE ONLY. TI-Nspire CX CAS is not allowed in this class.

**Mymathlab Technical Support:**
It is the responsibility of the student to contact MyMathLab Technical Support to resolve any technical issues. You are expected to have a computer and internet access available to you. The website being down/problem with internet access, or your computer not working is something to always keep in mind. There are computers on campus that you can use. Computers at Eastfield College are available in the library. However, please be mindful, computers are available when the college is open and only during certain hours. No assignment extensions will be given.
Please visit the following website for assistance:
[https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/technical-support/index.html](https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/technical-support/index.html)

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/](http://www.pearsonmylabandmastering.com/northamerica/system-requirements/)

**Hardware/Software Requirements for MyMathLab:**
For these requirements please contact MyMathLab and MathXL : Toll Free at 1-800-677-6337
Monday-Friday: 8 a.m. – 8 p.m. EST (US and Canada)
Sunday: 5 p.m. – 12 a.m. EST (US and Canada)
Online Support Forms and requirements:
http://www.mymathlab.com/system.html
http://www.mathXL.com/support/contactus.htm

Hardware/Software Requirements for eCampus:

Please visit the following site for all technical support for eCampus. This site provided tutorials to help you learn how to use eCampus. http://ecampus.support.dcccd.edu/student-tutorials/

STUDENT LEARNING OUTCOMES:
Upon successful completion of DMAT 0315 and MATH 1314 courses, students will:
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply knowledge of polynomial, rational, radical, exponential, logarithmic, absolute value and piecewise-defined functions.
   - Solve polynomial (including equations reducible to quadratic), rational, radical, exponential (including same base and different bases), logarithmic and absolute value equations related to these functions.
   - Solve polynomial, rational and absolute value inequalities.
3. Use graphing techniques, including, but not limited to, the use of a graphing calculator:
   - Increasing/decreasing/constant intervals, symmetry, even/odd functions, transformations (including translations, reflections, stretching and shrinking), completing the square, and finding relative maxima and minima graphically.
   - Recognize and be able to graph the basic equation of a circle.
4. Use the different theorems of polynomials (including the Rational Zeros Theorem) to evaluate all roots of higher degree polynomial and rational functions.
5. Recognize and solve systems of linear equations and their applications using matrices.
6. Demonstrate an understanding of sequences and series, including finding nth term & partial sums for arithmetic and geometric sequences.
7. Use the Binomial Theorem to expand binomials.
8. Recognize the different classifications within the real and complex number systems.

CORE OBJECTIVES:
MATH 1314 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 1314 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of various functions and systems of equation.

GRADING POLICY:
Your grade will be determined as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>Homework in MyMathLab</td>
</tr>
<tr>
<td>Percentage</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>15%</td>
<td>Quizzes in MyMathLab</td>
</tr>
<tr>
<td>20%</td>
<td>Modular Test Average in MyMathLab</td>
</tr>
<tr>
<td>15%</td>
<td>Class Attendance and participation</td>
</tr>
<tr>
<td>10%</td>
<td>Tutoring Center Attendance</td>
</tr>
<tr>
<td>25%</td>
<td>Midterm Exam and Final Exam</td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**GRADING RATIONALE:**
Grades will be determined as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
</tr>
</thead>
<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>
</tr>
</tbody>
</table>

**Final Examination:** A comprehensive, departmental final examination, will be administered in all MATH 1314 classes.

**MYMATHLAB HOMEWORK AND QUIZ ASSIGNMENTS:** Section homework assignments and section quizzes will be completed using MyMathLab.

**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 from 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
- 80% mastery required to proceed to next topic
- Can be accessed after due date
- Late problems penalized 10%

**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
- 80% mastery required to proceed to next topic
- Can be accessed after due date
- Late problems penalized 10%

Do not wait until the last minute to submit work. You are expected to have a computer and internet access available to you. The website being down/problem with internet access, or your computer not working is something to always keep in mind. There are computers on campus that you can use. Computers at Eastfield College are available in the library. However, please be mindful, computers are available when the college is open and only during certain hours. No assignment extensions will be given.

**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

MASTERY LEARNING:
Mastery learning is a major tenant of this course. This means that you will not be able to proceed to the next topic until you have mastered the skills being covered. All homework and quizzes require mastery. For the purpose of this course, mastery is defined as a minimum score of 80%.

MODULE TEST EXAMINATIONS: Students will have 4 Module Tests. Tests will be administered in MyMathLab. In MyMathLab you will find a Test Review for every Module Test. Test Reviews are optional. They are highly recommended and will help in preparation for module test. Scores on Test Reviews are omitted from student grades.

• Two attempts are allowed for each module test
• Module Test must be completed in one sitting

Make-up Module Test examinations will not be given. If you miss one of the Module tests and if you miss three or less classes throughout the semester, the final exam grade will be used as a substitute grade for that one missed test. Final examination cannot be made up.

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 student misses a class activity, student will receive a zero for that activity.

CLASS ATTENDANCE and PARTICIPATION: 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 this class we will have in-class group 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 student misses a class activity, student will receive a zero for that activity.

You will be required to attend class each day and will be given a daily attendance grade. At the end of the semester, all attendance grades and all in-class group activities will be averaged together and will count 15% of your course grade.

Please note that for certification purposes, participation in the course is defined as students registering for the course and accessing course materials in MyMathLab. If you have not logged into MyMathLab and did not complete orientation assignment by the certification date you will not be certified.

You are expected to regularly log into MyMathLab to complete work for the course in which you are enrolled. Students have the responsibility to consult with the instructor when a deadline cannot be met.

If a student is unable to complete a course (or courses) in which he/she is registered, it is the responsibility of the student to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester’s class schedule). If a student does not withdraw, he/she will receive a performance grade, usually a grade of “F”. Attendance will be taken each class period. It is the student’s responsibility to find out what was missed in class.

No extra credit will be given.
TUTORING CENTER ATTENDANCE: Students will be required to attend Eastfield College tutoring center. Each week you will attend at least one hour of tutoring at Eastfield College Tutoring Center. Please access the following website for more information on tutoring services at Eastfield College: https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx.

The instructor will collect your Tutoring Center weekly attendance. This weekly attendance will be graded as follows: 1 hour or more of attendance per week = 100, less than 1 hour of attendance per week = 0. Make sure that you sign in and sign out every time you visit Eastfield College tutoring center. Otherwise your attendance at the tutoring center will not be recorded and you will not receive credit for that hour of attendance.

MIDTERM EXAM: Midterm Exam will be administered in class as listed in the course pacing calendar. Students will be given 3 hours to complete this exam during the exam period specified for the class. Students may use their calculator, but not a cellphone. Students will not be allowed to collaborate on the midterm exam. In MyMathLab you will find a review for the midterm exam. This review is not optional.

Midterm Exam Policies:
- Bring instructor approved calculator, 2 scantrons, pencil and eraser
- Written paper and pencil exam
- Must be completed independently
- Students have one attempt on the midterm exam
- Midterm exam cannot be made up
- Late midterm exam submissions are not accepted under any circumstance.

FINAL EXAM: A comprehensive, departmental final examination, will be administered in all DMAT 0315-Math 1314 corequisite courses. Students will be given 3 hours to complete the comprehensive final exam during the exam period specified for the class. Students may use their calculator, but not a cellphone. Students will not be allowed to collaborate on the final exam. In MyMathLab you will find a review for the final exam. This review is not optional.

Final Exam Policies:
- Bring instructor approved calculator, 2 scantrons, pencil and eraser
- Written paper and pencil exam
- Must be completed independently
- Students have one attempt on the final exam
- Final exam cannot be made up
- Late final exam submissions are not accepted under any circumstance.

POLICY ON MISSED TESTS AND ASSIGNMENTS: There are no make-up assignments in this class. All assignments have strict deadlines. Due dates are non-negotiable and can be viewed in MyMathLab and in our Course Pacing Calendar.

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.

As with all communication, be sure that your comments are appropriate and respectful of the diversity of thought that exists in this course. All communication should promote a positive, safe and productive learning environment for all. Follow Rules of Netiquette every time conversing with me or your classmates online and face-to-face.

Please see the following website for more information: https://www.eastfieldcollege.edu/au/fastfacts/legal/policies-for-syllabi/pages/fall-2018.aspx

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

STRATEGIES TO BE SUCCESSFUL:

- Attend every class.
- Ask questions.
- Read each chapter.
- Show all work.
- Check your answers.
- Make note of problems for which you have questions.
- Review class notes.
- STUDY FOR TESTS.

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!

MATH 1314 CO-REQUISITE COURSE OUTLINE:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 – 6.8</td>
<td>Radical Expressions and Functions; Rational Numbers as Exponents; Simplifying Radical Expressions, Addition, Subtraction, Multiplication and Division of Radical Expressions; Solving Radical Equations; Applications Involving Powers and Roots: Pythagorean Theorem; Increasing, Decreasing, and Piecewise Functions</td>
</tr>
<tr>
<td>7.1 – 7.5; 8.1 – 8.6</td>
<td>Symmetry; Transformations; The Complex Numbers; Quadratic Equations, Functions, Zeros, and Models; Analyzing Graphs of Quadratic Functions; Polynomial Functions and Models; Graphing Polynomial Functions; Polynomial Division; The Remainder Theorem and the Factor Theorem; Theorems about Zeros of Polynomial Functions; Rational Functions; Polynomial and Rational Inequalities</td>
</tr>
<tr>
<td>9.1 – 9.7</td>
<td>The Composition of Functions; Inverse Functions; Exponential Functions and Graphs; Logarithmic Functions and Graphs; Properties of Logarithmic Functions; Solving Exponential and Logarithmic Equations; Applications and Models; Growth and Decay; Compound Interest</td>
</tr>
<tr>
<td>11.2; 12.1 – 12.3, 12.7</td>
<td>Circles; Sequences and Series; Arithmetic Sequences; Geometric Sequences and Series; The Binomial Theorem</td>
</tr>
</tbody>
</table>

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 in class.

Revised: 10/18/19