STEM Division

MATH 1314-48313(Fast Track & Blended), 3 Credit Hours
College Algebra
Fall 2/2019 Fast Track (8 Weeks) Blended Course
Classes are Mondays and Wednesdays from 10/22/2019 to 12/12/2019
Classes meet 11:00 a.m. to 12:50 p.m.
Room C305

Instructor: Dr. Timothy Lo

Contact Information:
Office: C306
Office Hours: MTWR 6:45am-7:45am, others by appointment
Phone: (972) 860-7675
Email Address: timothylo@dcccd.edu

Course Description:
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 the prerequisite for MATH 1316. 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 or 4 Lec.)

Student Learning Outcomes:
Upon successful completion of this course, students will:
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

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.

**Prerequisites:**
Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0310.

**Textbook and Other Course Materials:**
- OR

- Microsoft Windows 7 and 8 users should use one of the following browsers with MyMathLab courses-- Chrome, Firefox or Microsoft Edge. Click [here](#) for other system requirements.
- If you use mymathlab, the course ID is lo80378. This requires you to purchase a license code from Prentice Hall.

As of Spring 2010, a graphing calculator is required for all College Algebra Courses. You may choose your own graphing calculator model; however, TI 83 or TI 84 version is preferred. Graphing Calculators may not be allowed during some examinations.

**Grading Policy:** Your course grade will be based on three exams, each being 15% of the total grade, homework of 15% and a comprehensive departmental final exam that will be 40% of the total grade. No notes, books, cell phones or any electronic devices are allowed during exam. During the exam, if you exit the classroom, you may not return to continue the exam. There is no makeup to any exam unless proper excuse is made before the exam. Exam dates will be announced in class. Students should purchase scantrons from the campus book store (Form # 882-E). If you use calculator, it must be from a standalone unit such as TI-84, etc. You are not allowed to use any calculator from any cell phone or other devices during exam. Homework assignments and their due dates will be provided through eCampus and must be submitted using a scantron.

**Grading Rationale:** For a semester average from:

<table>
<thead>
<tr>
<th>Course Grade is:</th>
<th>90-100</th>
<th>80-89</th>
<th>70-79</th>
<th>60-69</th>
<th>Below 60</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
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**Final Examination:**
A comprehensive, departmental final examination, which will represent at least 25% of the class grade, will be administered in all College Algebra classes.

**Policy on Missed Tests and Assignments:** Makeup Exams will not be given. Late assignments (if any) will not be accepted.
**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.

(2004-2006 Dallas County Community College District Catalog, page 58) Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

Instructors are responsible for describing attendance policies and procedures. If you are unable to complete a course (or courses) in which you are enrolled, it is your responsibility to withdraw from the course by the appropriate date. If you do not withdraw, you will receive a performance grade, usually a grade of “F”.

Students who are absent from class for the observance of a religious holiday may take an examination or complete an assignment scheduled for that day within a reasonable time after the absence, if not later that the 15th day of the semester, the student notified the instructor(s) that the student would be absent for a religious holiday. Sec. 51.511 TX Educ. Code.

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

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”.

**Drop Date:**
Last date to drop with a grade of “W” is 11/27/2019.

**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. No cell phone use is allowed in class unless you are given permission. You must use a standalone calculator instead of using the one from your cell phone. You can go to the library to borrow calculator for your class or exams.

**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.

**INSTITUTIONAL POLICY AND SERVICES:**

Institutional Policies relating to this course can be accessed from the following link:

https://www.eastfieldcollege.edu/syllabipolicies
## Course Coverage:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1, 1.5-1.7, 2.1-2.2, 2.5-2.8</td>
<td>Real number system, Equations, Relations and Functions; Circles</td>
</tr>
<tr>
<td>3.1-3.6</td>
<td>Polynomial and Rational functions; Theory of Functions</td>
</tr>
<tr>
<td>4.1-4.5</td>
<td>Exponential, Logarithmic and Special functions</td>
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<tr>
<td>6.3-6.5, 8.1-8.3, 8.5</td>
<td>Progressions, The Binomial Theorem, Matrices, Determinants, mathematical reasoning skills, Sequences, Series and Applications</td>
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Revised: 08/02/18