**Term:** FALL 2019 2nd 8-Week Course  
**Course:** MATH-2412-48001  
**Course Dates:** 10/22/2019-12/12/2019  
**Class Location:** C105  
**Class Time:** 11:00AM-12:50PM on Mondays, Tuesdays, Wednesdays and Thursdays

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Dr. Minh Nguyen</th>
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</thead>
<tbody>
<tr>
<td>Phone:</td>
<td>(972) 860-8337</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:MinhNguyen@dcccd.edu">MinhNguyen@dcccd.edu</a></td>
</tr>
</tbody>
</table>
| Office & Office Hours: | C327  
|                   | 10:00AM – 11:00AM Mondays, Tuesdays, Wednesdays and Thursdays |

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

**Course Drop Date:** November 27, 2019

**Certification Date:** October 28, 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)

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**Course Description:**  
This course consists of the study of algebraic and trigonometric topics including polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included. (4 Lec.)

**Prerequisite:** MATH 1316.

**Textbook and Other Course Materials:**  
9780134856513 (a-la-carte textbook plus MML access) OR  
9780134852188 (MML access only)  
• MyMathLab - Microsoft Windows 7 and 8 users should use one of the following browsers with MyMathLab courses-- Chrome, Firefox or Internet Explorer 10 and 9. Click [here](https://www.eastfieldcollege.edu/au/fastfacts/legal/pages/policies-for-syllabi.aspx) for other system requirements.

**Core Objectives:**  
MATH 2412 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.

**Student Learning Outcomes:**
After completing this course, the student should be able to:
1. Demonstrate and apply knowledge of properties of functions.
2. Recognize and apply algebraic and transcendental functions and solve related equations.
3. Apply graphing techniques to algebraic and transcendental functions.
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
5. Prove trigonometric identities.
6. Solve right and oblique triangles.

**Grading Policy:**
Homework (MyMathLab): 10%, Exam Review: 10%, Exams (4 exams): 55%, Final (Comprehensive): 25%.

**Grading Rationale:** FG = 0.10*HW + 0.10*Reviews + 0.55*(Exam1+Exam2+Exam3+Exam4)/4 + 0.25*Final.
The letter grade will be recorded using the following ranges:
A: [90, 100]; B: [80, 89]; C: [70, 79]; D: [60, 69] and F: [0, 59].

**Policy on Missed Tests and Assignments:** Student must notify the instructor within 48 hours of the exam date to reschedule (up to maximum of 2 times). Missed Exams will receive 0.

**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.

**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 cellphones, tablets or smartwatches are allowed during tests.

**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.

**COURSE OUTLINE:**

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>SECTIONS</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1</td>
<td>1.1, 1.3, 1.4, 1.5</td>
<td>Functions And Graphs</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>3.1, 3.4, 3.5</td>
<td>Polynomial and Rational Functions</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>4.1 – 4.6</td>
<td>Composition, Inverse, Exponential and Logarithmic Functions</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>5.2 – 5.5</td>
<td>The Trigonometric Functions</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>6.1 – 6.7</td>
<td>Analytic Trigonometry</td>
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<tr>
<td>Chapter 7</td>
<td>7.1 – 7.3</td>
<td>Applications of Trigonometric Functions</td>
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<tr>
<td>Chapter 8</td>
<td>8.1, 8.2, 8.4 – 8.7 (8.3)</td>
<td>Polar Coordinates, Vectors</td>
</tr>
<tr>
<td>Chapter 9</td>
<td>9.1 – 9.7</td>
<td>Analytic Geometry, Parametric Equations</td>
</tr>
<tr>
<td>Chapter 10</td>
<td>10.5</td>
<td>Partial Fraction Decomposition</td>
</tr>
<tr>
<td>Chapter 11</td>
<td>11.1 – 11.4 (11.5)</td>
<td>Sequences, Series, Mathematical Induction, Binomial Theorem</td>
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*Optional Sections marked in Red* 

Revised: 05/16/19