STEM Division

MATH 1316-48400, 3 Credit Hours
Plane Trigonometry
Fall 2019 – Flex Term2

Classes are ONLINE

Instructor:
Christine Giraud

Contact Information:
Office: C-263
Office Hours: By appointment only
Phone: 972-860-7376
Email Address: christinegiraud@dcccd.edu
**Email is the best way to contact me. Your email will be answered within 24 hours, except on the weekends/holidays. Those emails will be answered Monday in the order they were received.**

Prerequisites:
MATH 1314 or MATH 1414 or equivalent.

Course Description: In depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates, and parametric equations may be included. (3 Lec.)

Student Learning Outcomes:
Upon successful completion of this course, students will:
1. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
2. Graph trigonometric functions and their transformations.
3. Prove trigonometric identities.
4. Solve trigonometric equations.
5. Solve right and oblique triangles.
6. Use the concepts of trigonometry to solve applications.

Core Objectives:
MATH 1316 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 1316 develops **Critical Thinking**, **Communication**, and **Empirical and Quantitative Skills** by requiring students to solve and analyze applications of trig functions and their graphs.

**Textbook and Other Course Materials:**
  - You DO NOT have to purchase the textbook as it is available to you online through MyMathLab
- My Math Lab is REQUIRED for this course. It is NOT optional.
  - My Math Lab - 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/)
  - **My Math Lab Course ID:** giraud24419
  - **Graphing calculator (TI-83 or TI-84)**

**Grading Policy:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes (Reviews)</td>
<td>5%</td>
</tr>
<tr>
<td>4 Online Tests</td>
<td>30%</td>
</tr>
<tr>
<td>Proctored Exams (Midterm &amp; Final Exam)</td>
<td>50% (25% each)</td>
</tr>
</tbody>
</table>

**Description of the course:**

1. All homework, quizzes and online tests will be submitted through MyMathLab (MML)
2. You are required to take two proctored exams (the midterm and the final) administered on campus at the EFC Testing Center (or other testing facility if arranged in advance).
   a. **If you need to take the midterm or the final exam at a different testing facility other than Eastfield College, you need to notify me by October 28, 2019.** You will need to send me an email stating which testing facility you will be taking your exam and the email address of the director of the testing facility. Both exams are done on the computer, so I will need to send them the instructions, formula sheets, and passwords to the exam. If you **DO NOT** email me by **October 28th**, both exams must be taken at the Eastfield Testing Center. Please be aware that some testing facilities charge a $10- $25 fee for each exam taken at their facility. You are responsible for any fees.
3. Each homework, quiz and online test has a specific due date that is **highly enforced**.
   a. Only the homework can be turned in late. However, there is a 10% penalty deduction for the homework problems turned in past the specified deadline.
   b. The final submission deadline for all late homework is the day before the final exam is due.
   c. You may work ahead as much as you want.
4. The reviews for each online test are considered your quizzes and count for 5% of your overall score.
   a. Each review covers two chapters as each online test covers those two chapters that you reviewed on.
   b. You have two attempts for each review.
      i. Both attempts are due on the date specified on the course pacing calendar.
   c. The reviews cannot be turned in late.
5. Each online test covers two chapters and will account for a total of 30% of your overall score.
   a. You have a total of 4 online tests
   b. You will have two attempts for each online test and have 120 minutes for each attempt of each test.
      i. Both attempts are due on the date specified on the course pacing calendar.
c. I will take the highest score of the two attempts (if you did both attempts)
d. If you are satisfied with grade of the first attempt of that test, you do not have to do the other attempt.
e. Each online test (the first and second attempt) has a specific deadline and CANNOT be turned in late. If the deadline of the online test is missed, a grade of a zero will be placed in the gradebook.

6. The Midterm Exam will cover Chapters 1 – 4. This counts as 25% of your overall score. The midterm must be taken by November 14, 2019
   a. Please complete the midterm review to prepare for your midterm exam. This review counts as a quiz grade.
   b. You will only have 1 attempt for the midterm exam.
   c. The midterm exam must be taken by the specified deadline. If the deadline of the midterm is missed, a grade of a zero will be placed in the gradebook.

7. The Final Exam is covers Chapters 5 – 7, and 9. This counts as 25% of your overall score. The final must be taken by December 11, 2019
   a. Please complete the final exam review to prepare for your final exam. This review counts as a quiz grade.
   b. You will only have 1 attempt for the final exam.
   c. The final exam must be taken by the specified deadline. If the deadline of the final exam is missed, a grade of a zero will be placed in the gradebook.

8. ALL late homework assignments have a final submission deadline of the day before the final exam.

9. Formulas – some formulas need to be memorized for each proctored exam and some don’t. In MML, I have clearly defined what needs to be memorized for each exam under the tab labeled "Formulas." I highly recommend in printing those sheets out while doing the homework to ensure understanding of what is expected to be known.

**Instructional Components:**

**Step 1:** Watch a video
- Video lecture introduces each section of each chapter
- Must be accessed before each homework assignment
- Can be accessed after due date
- Taking notes while watching the video is highly recommended.

**Step 2:** Homework
- Consists of problems from each section
- Problem can be repeated until mastered - select “Similar Exercise” after each 4th incorrect attempt
- 70% mastery required to proceed to next topic
- Can be accessed after due date
- Late problems penalized 10%

**Step 3:** Quizzes/Reviews
- Consists of problems from two chapters of homework problems.
- Must be accessed before each test
- Can be taken up to two times.
- In order to access the review, the student must have received 70% on each homework assignment that the review covers
- Late submission not allowed
- Midterm and final exam reviews are to be taken before taking those proctored exams

**Step 4:** Online Tests
- Assesses student understanding of two designated chapters
- Can be taken up to two times
- Only the highest score of the two attempts will be put into the gradebook
- Late submission not allowed

**Grading Rationale:**

<table>
<thead>
<tr>
<th>Overall Score</th>
<th>Letter Grade</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage Range</td>
<td>Grade</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>89.5% – 100</td>
<td>A</td>
</tr>
<tr>
<td>79.5% – 89.4%</td>
<td>B</td>
</tr>
<tr>
<td>69.5% – 79.4%</td>
<td>C</td>
</tr>
<tr>
<td>59.5% – 69.4%</td>
<td>D</td>
</tr>
<tr>
<td>59.4% and Below</td>
<td>F</td>
</tr>
</tbody>
</table>

**Policy on Missed Assignments such as Homeworks and Quizzes:** If the student misses a homework assignment, a 10% penalty deduction will be placed on only the homework problems turned in passed the deadline. If the student misses a Quiz assignment (aka the test reviews) a zero will be placed in the gradebook.

**Policy on Missed Online Tests:** **NO MAKE-UP TESTS or RE-TESTS.** Each test has a specific deadline that is highly enforced. If the student misses the test, a grade of a zero will be placed in the gradebook. The second attempt of the test (if you did take it) must also be submitted by the deadline of the first attempt.

**Policy on Midterm and Final Examinations:** The Midterm and Final Exam are administered on campus at the EFC Testing Center *(or other testing facility if arranged in advance)*. These exams are computer based and you will need to log into ecampus to access them. Once you are inside the course, click on “Electronic Tests” to take the exam. A proctor will then be instructed to type in the password.

The EFC Testing Center is located in Building C, Room 114. It is open from 8 a.m. – 9 p.m. Monday through Thursday and 9 a.m. – 5 p.m. on Friday. No tests will be issued to students during the last hour of operation. Take a picture ID and know your course name, number, section number (MATH 1316-48400) and which test you are taking (ex. Midterm or Final Exam). You may contact the EFC Testing Center at 972-860-7011.

- If you need to take the midterm or the final exam at a different testing facility other than Eastfield College, you need to notify me by October 28, 2019. You will need to send me an email stating which testing facility you will be taking your exam and the email address of the director of the testing facility. Both exams are done on the computer, so I will need to send them the instructions, formula sheets, and passwords to the exam. If you DO NOT email me by October 28th, both exams must be taken at the Eastfield Testing Center. Please be aware that some testing facilities charge a $10-$25 fee for each exam taken at their facility. You are responsible for any fees.
- The Midterm Exam will cover Chapters 1 - 4 and must be taken by November 14, 2019
- The Final Exam will cover Chapters 5 – 7 and 9 and must be taken December 11, 2019
  - Formula sheets will be given for the final exam. Please see the “Formulas” tab in MML
- Only 1 attempt is allowed for each proctored exam.
- If the student misses the proctored exam, a grade of a zero will be placed in the gradebook.

**Attendance Policy:**
Any student that has not registered on MyMathLab AND completed the orientation assignment by 7 pm on October 28, 2019 will NOT be certified as having attended and consequently may be dropped from the class. 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”.

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 than the 15th day of the semester, the student notified the instructor(s) that the student would be absent for a religious holiday. Sec. 51.911 TX Educ. Code.

**Drop Date:**
Last date to drop with a grade of “W” is **November 29, 2019**

**Drop Policy:**
To drop a class or withdraw from the college, students must follow the prescribed procedure. It is the student’s responsibility to drop or withdraw. Failure to do so will result in receiving a performance grade, usually grade of “F”. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a “W” (Withdraw) in each class dropped. The deadline for receiving a “W” is indicated on the academic calendar and the current class schedule. If you are unable to complete this course, you must withdraw from it by November 29, 2019. For more information, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C 119.)

ADDITIONAL RESOURCES:
The Math Spot (http://www.eastfieldcollege.edu/as/Mathspot/index.asp) provides tutoring in Mathematics and Developmental Mathematics. Students are encouraged to take advantage of this service for additional help in their course work. The Math Spot is located in room C-201, and the phone number is 972-860-7062. Visit the link above for more information on tutors, hours of operation and policies.

Institutional Policies relating to this course can be accessed from the following link:
https://www.eastfieldcollege.edu/syllabipolicies

Course Outline:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Sections</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1</td>
<td>1.1 – 1.5</td>
<td>Angles, Triangles, Trigonometric Functions, Reference Angles, Trigonometric Identities</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>2.1 – 2.3</td>
<td>Right Triangle Trigonometry</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>3.1 – 3.4</td>
<td>Radian Measure, Arc Length Area of a Circular Sector, Unit Circle, Linear and Angular Speed</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>4.1 - 4.3</td>
<td>Graphs of Trigonometric Functions</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>5.1 – 5.4</td>
<td>Trigonometric Identities, Sum/Difference, Double Angle, Half Angle, Product-to-Sum and Sum-to-Product</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>6.1 – 6.3</td>
<td>Inverse Trigonometric Functions, Solving Trigonometric Equations</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>7.1 – 7.4</td>
<td>Law of Sines, Law of Cosines, Area of a Triangle</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>8.1 – 8.3 (Optional)</td>
<td>Vectors</td>
</tr>
<tr>
<td>Chapter 9</td>
<td>9.1 – 9.5</td>
<td>Polar Coordinates, Polar Equations, Complex Numbers</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 05/12/2014