

Trigonometry Fall 2014

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Textbook: Trigonometry: A Unit Circle Approach (Eighth Edition) by Sullivan

College credit: This course can be taken through UMKC for two hours of college credit. The current cost for the course is \$180.06. Students will be given enrollment information in class. Note, in order to earn college credit through UMKC, a student must earn a **C or better** in the course.

Materials: Please bring a 3-ring binder notebook, paper, pencils, scientific calculator, and your textbook with you to every class. A scientific calculator (sine, cosine and tangent buttons) is needed for this course. I recommend the TI 30X, TI 34X or TI36X.

Course description: Trigonometry is the study of the measurements of the parts, sides and angles of the triangles.

The tentative units which will be covered in this course are as follows :

Unit 1:

Trigonometric Functions

- Angles and their measures
- Properties of trigonometric functions: unit circle approach

Unit 2:

Applications of Trigonometric Functions

- Right triangle application
- Law of Sines
- Law of Cosines
- Area of Triangles

Unit 3:

Graphs of Trigonometric Functions

- Graphs of the sine and cosine functions
- Graphs of the tangent, cotangent, secant and cosecant functions
- Phase shifts and transformations of the six trigonometric functions

Unit 4:

Analytic Trigonometry

- Inverse sine, cosine, and tangent functions
- Trigonometric Identities
- Sum and Difference Formulas
- Double and Half-Angle Formulas
- Trigonometric Equations

Grading:	Formative Assessments	20%
	Summative Assessments	80%

- Students are to expect some type of homework nearly every night.
- Formative Assessments (Proficiency Checks): Proficiency checks will be given periodically throughout each unit. Students will have one opportunity to retake each proficiency check if desired within one week of feedback and prior to the summative assessment.
- Summative Assessments (Unit exams): Exams will consist of two parts –multiple choice and free response. A typical exam will have at most 15 multiple choice questions and 4-5 free response questions.
- A final exam will be given and is required for all students. The above percentages will be calculated and assigned 90% of your total grade. The final exam will be 10% of your total grade.

The grading scale used for Trigonometry is the same used by all other courses at Ray-Pec

A	93-100	C	73-77
A-	90-92	C-	70-72
B+	88-89	D+	68-69
B	83-87	D	63-67
B-	80-82	D-	60-62
C+	78-79	F	0--59

Tutoring: I would like to be a student's first contact for help. I am available for additional help some mornings and most afternoons. If possible, please let me know in advance so that other meetings or obligations do not overlap. In addition, students may call me at home for additional help. In the past many students have formed study groups. These have proven to be effective for student success in class.

Peer Tutoring: Because students demonstrate a deeper understanding when able to explain a concept to others, students will be expected to share their solutions to classmates' questions on homework. All students are expected to be actively involved in the question/answer phase of problem solving.

Additional thoughts: Students, please don't be alarmed if you start off slowly. Give yourself time to adjust to the pace and rigor of the course. Allow additional time in your day for studying trigonometry.