Math 117 A01 Summer 2012
10:20-12:10 MTWRF, TCCW 305
3 hours Credit

Dr. Spraker
Office: COHH 4128
Office Hours: 12:10-1:30 MTWR
Others by appointment or capture.
john.spraker@wku.edu
http://people.wku.edu/john.spraker/home.html
1-270-745-6220 - Office
1-270-782-6018 - Home

Welcome to Trigonometry! I am looking forward to getting to know each of you and we should have a lot of fun learning some interesting mathematics together. Trigonometry is one of the most applicable areas in mathematics. It is used for surveying, measurement, calculus and many other things. It has a long history. Many people have used trigonometric principles to measure inaccessible objects or objects at great distances. An understanding of this subject is essential for anyone who wishes to study the sciences, mathematics, or engineering.

To be successful in this course you must keep up. All homework will be online using WebAssign. I have sent you an email with directions for self-enrolling. You need to do this immediately since homework will be assigned daily. You need to be prepared before each class. This math class moves very rapidly, so you cannot afford to miss a class or not do homework every night. If you are having problems with a particular problem, call or see me before class. If I did not like talking to students, I would not teach for a living. Don't hesitate to ask questions.

There will be three in-class exams and a comprehensive final as well as numerous homework assignments. The dates for the exams are below. In addition to this you are required to purchase a graphing calculator and the textbook. You will use both of these daily. I will be using the TI 84 plus in the classroom.

Exams:
Friday June 15
Friday June 22
Friday June 29
Final: Thursday July 6

Your grades will be determined as follows:

Homework	15%
Exams	60%
Final Exam	25%

Student Disability Services

In compliance with university policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Office for Student Disability Services in Downing University Center, A-200. The phone number is (270) 745-5004.

Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Math 117 Syllabus

Textbook: *Trigonometry*, 8th Edition, 2011 (Larson)

Chapter P: Prerequisites……As needed
Section P.3 (Other sections for review as desired by instructor)
Chapter 1: Trigonometry……4 days
Section 1.1 Radian and Degree Measure
1.2 Trigonometric Functions: The Unit Circle
1.3 Right Triangle Trigonometry
1.4 Trigonometric Functions of Any Angle
1.5 Graphs of Sine and Cosine Functions
1.6 Graphs of Other Trigonometric Functions
1.7 Inverse Trigonometric Functions
1.8 Applications and Models

Chapter 2: Analytic Trigonometry…….5 days
Section 2.1 Using Fundamental Identities
2.2 Verifying Trigonometric Identities
2.3 Solving Trigonometric Equations
2.4 Sum and Difference Formulas
2.5 Multiple-Angle Formulas

Chapter 3: Additional Topics in Trigonometry……3 days
Section 3.1 Law of Sines
3.2 Law of Cosines
3.3 Vectors in the Plane
3.4 Vectors and Dot Products (Optional)

Chapter 4: Complex Numbers…….1 day
Section 4.1 Complex Numbers (Optional)
4.2 Complex Solutions of Equations (Optional)
4.3 Trigonometric Form of a Complex Number
4.4 DeMoivre's Theorem
Chapter 6: Topics in Analytic Geometry……..2 days
6.6 Parametric Equations
6.7 Polar Coordinates
6.8 Graphs of Polar Equations
Exams / Review……..…..4 days