

**Marshall University
Syllabus**

Course Title/Number	MTH 122: Plane Trigonometry Section 204 CRN 4094
Semester/Year	Spring 2017
Days/Time	TR 2:00 – 3:15pm
Location	Smith Hall 418
Instructor	Dr. Michael Otunuga
Office	WAEC 3229
Phone	304 696-3049
Textbook	Trigonometry by Dugopolski, 4 th edition ISBN: 9780321923486.
Calculator	TI-83 or similar
E-Mail	otunuga@marshall.edu
Office/Hours	MTWR 1-2pm; 4-5pm; others by appointment. To make an appointment, email in advance when possible.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description: From Catalog

A study of the trigonometric functions, graphs of the trigonometric functions, identities, equations, inverse trigonometric functions, vectors, complex numbers, and applications.

Course Objective

<u>Course Objective</u>	➤ To give students a solid understanding of trigonometric functions and their applications. ➤ To help prepare students for a course in calculus with analytic geometry. Students should also take college algebra before attempting calculus ➤ To help prepare students for study in areas such as physics, engineering, biology, chemistry, pharmacy, geology, medicine, and safety technology.
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Course Content

<u>Course Content</u>	➤ Trigonometric Functions ➤ Acute angles and Right Triangles ➤ Radian Measure and Circular Functions
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	➤ Graphs of Circular Functions ➤ Trigonometric Identities ➤ Inverse Circular Functions and Trigonometric Equations ➤ Applications of Trigonometry and Vectors ➤ Complex Numbers and Polar Coordinates
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The table below shows how each student learning outcomes will be practiced and assessed in the course.

Course Student Learning Outcomes	How students will practice each outcome in this Course	How student achievement of each outcome will be assessed in this Course
Students will analyze, compare, evaluate, and graph the six trigonometric functions and six trigonometric inverse functions	Students will complete homework, classwork, and quizzes to get practice and feedback.	Participation in quizzes, homework, Comprehensive final exam covering concepts encountered in higher math courses.
Students will use trigonometric functions to solve real-world applications involving triangles and vectors.	Students will complete homework, classwork, and quizzes to get Practice and feedback.	Participation in quizzes, and presentation/explanation of homework solutions to classmates
Students will demonstrate the ability to work with trigonometric identities and solve trigonometric equations in other mathematics courses such as calculus.	Students will complete writing assignments, homework, Classwork, and quizzes as part of daily classwork and quizzes.	Tests and quizzes, including problems requiring synthesis of many ideas to solve problems
Students will apply trigonometric functions to multiply and divide complex numbers and find the powers and roots of complex numbers.	Students will complete homework, classwork, and quizzes to get practice and feedback.	Tests and quizzes, including problems requiring synthesis of many ideas to solve problems

Course Requirement

Homework: Homework will be assigned weekly online on WeBWork. Students are advised to finish the problems before the due date.

Quizzes: There will be a brief quiz during class meetings on Thursday. Make-up quizzes are only given in the event of a university-excused absence.

Classwork: Classwork will be given to students. Further instruction will be given in class.

Tests: There will be 3 in-class tests during the semester and a comprehensive Final Exam. If you know in advance that you will have an excused absence on a test date, please make arrangements to take the test early.

Make-up exams will only be given in the event of a university-excused absence.

Final Exam: The final exam will be on **Thursday May 4, 2017 from 12:45-2:45pm**. Please make travel arrangements accordingly. Make-up/early tests will not be available to accommodate individual travel plans.

Grading Policy

Attendance	25pts
Quizzes	50pts
Homework	75pts
Three major exams	300pts
Final (comprehensive) exam	150pts

The grading scale is rigid.

90.00 – 100	A
80.00 – 89.99	B
70.00 – 79.99	C
60.00 – 69.99	D
Below 60.00	F

Attendance Policy

Attendance **is required**. Unexcused absences from **six** classes will result in a reduction of one letter grade for the semester; unexcused absences from **seven or more** classes will result in an F. Inform me on time if you'll be missing more than five classes in the semester. **You will not be allowed to take makeup quizzes or exams, homework, etc. unless you have a university excuse.** If an excused absence results in missing quiz/exam/hw, then a make-up date (*within one week of absence*) must be scheduled with course instructor. Use of cell phone, sleeping during class, leaving class early/coming to class late will be counted as an unexcused absence. Consult your handbook regarding university excused absences.

TENTATIVE COURSE SCHEDULE (may change depending on class' pace)

Week (Mon - Fri)	Section Coverage	Other Activities/Due Time
Week 1 (1/9 – 1/13)	1.1, 1.2	Introduction; syllabus discussion on day 1
Week 2 (1/16 – 1/20)	1.3, 1.4	Monday 1/16: MLK Day (No class)
Week 3 (1/23 – 1/27)	1.5, 2.1	
Week 4 (1/30 – 2/3)	2.2, 2.3	
Week 5 (2/6 – 2/10)	2.4, Review	Test 1: Thursday 2/9, covering Chapters 1 and 2
Week 6 (2/13 – 2/17)	3.1, 3.2	
Week 7 (2/20 – 2/24)	3.3, 3.4	
Week 8 (2/27 – 3/3)	3.5, 3.6	

Week 9 (3/6 – 3/10)	3.6, Review	Test 2: Thursday 3/9 covering Chapters 3
Week 10 (3/13 – 3/17)	4.2, 4.3, 4.4	
Week 11 (3/20 – 3/25)	Spring Break	Spring Break – No class
Week 12 (3/27 – 3/31)	5.1, 5.2	
Week 13 (4/3 – 4/7)	5.3, 5.4, Review	Test 3: Thursday 4/6 covering Chapters 4 and 5
Week 14 (4/10 – 4/14)	6.1, 6.2	
Week 15 (4/17 – 4/21)	6.3, 6.4, 6.5	
Week 16 (4/24 – 4/28)	Term Review	
Week 17 (5/1 – 5/5)	Exam Week	Final Exam: Thursday May 4, 2017 from 12:45-2:45pm.