**Marshall University**

**Syllabus**

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| Course Title/Number  | **MTH 122: Plane Trigonometry Section 204 CRN 4094**  |
| Semester/Year  | Fall 2017 |
| Days/Time  | M-F/ 12:45-2:26 |
| Location  | Huntington High School Room F134 |
| Instructor  | Karen Curnutte |
| Office  | Huntington High School |
| Phone  | 304 528-6571 |
| Textbook  | Trigonometry by Dugopolski, 4th edition ISBN: 9780321923486.  |
| Calculator  | TI-83 or similar  |
| E-Mail  | kcurnutt@k12.wv.us  |
| 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 be going to [www.marshall.edu/academic-affairs](http://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

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| **Course Objective**  | * 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

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| **Course Content**  | * 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.

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| **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 daily and recorded in on course daily. Students are advised to finish the problems before the due date.

Quizzes: There will be a brief quiz during class several time weekly. Make-up quizzes are given before school at 7:20 am.

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

Tests: There will be several 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 or make it up promptly on return.

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.

Grade scale

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. Y**ou 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)

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| **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

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| 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**.