

MONTGOMERY COLLEGE
Course Syllabus
Mathematics and Statistics
Introduction To Trigonometry
Spring 2019

I. Contact Information

Instructor: Darren Smith

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Office Hours: Online and by appointment

II. General Course Information

MATH098 Introduction to Trigonometry

CRN: _____

Course Description:

MATH 098 - INTRODUCTION TO TRIGONOMETRY

An examination of right triangle trigonometry and applications. Topics include graphs and equations involving sine, cosine, tangent, and related basic concepts. Usually scheduled to meet 5-7 weeks in the first half or second half of a semester. PREREQUISITE: MATH 050 or COREQUISITE MATH 165 (if completed in the first half of the semester), appropriate score on mathematics assessment test, or consent of department. Assessment level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990.

Non-credit

1.000 Bill Hours

This course is designed to prepare students for topics in Precalculus.

III. Textbooks, Workbooks, and Supplies

Text: *Basic Trigonometry*, by Stephen Perencevich Department of Mathematics & Statistics
Montgomery College

IV. Course Requirements

Grading

Homework: 10%

Test 1 45%

Test 2 45%

Letter grades will be assigned as follows:

90% – 100%: A 80% – 89.9%: B 70% – 79.9%: C Below 70%: U

Additional resources:

- 1) <http://www.purplemath.com/modules/index.htm>
- 2) <http://tutorial.math.lamar.edu/Extras/AlgebraTrigReview/AlgebraTrigIntro.aspx>
- 3) <https://www.khanacademy.org/math/trigonometry>
- 4) <http://www.stitz-zeager.com/szct07042013.pdf>

Montgomery College
MATH 098 Course Outcomes

| # | <i>Outcome: Upon completion of this course/program a student will be able to:</i> |
|---|--|
| 1 | Solve right-triangle trigonometric problems, including word problems. |
| 2 | Solve simple trigonometric equations. |
| 3 | Graph $y = A\sin(x)$, $y = A\cos(x)$ and $y = \tan(x)$ without a calculator. |
| 4 | Evaluate the 6 trigonometric functions without a calculator for <ol style="list-style-type: none">a. the angles of a right triangleb. an angle in standard position defined by a point in the plane.c. quadrantal angles.d. special angles: 30°, 45°, and 60° as well as those angles whose reference angles are 30°, 45°, 60°. |
| 5 | Evaluate the 6 trigonometric functions for any angle in degrees or radians with a calculator. |
| 6 | Define degrees and radians. <ol style="list-style-type: none">a. Convert between degrees and radiansb. Locate angles (in radians) on a unit circle. |
| 7 | Sketch an angle in standard position <ol style="list-style-type: none">a. Find and use reference angles.b. Find and understand coterminal angles. |
| 8 | Use basic identities to simplify expressions involving trigonometric functions. |

Important Links for Students

Assessment Centers. The Montgomery College Assessment Centers provide PLACEMENT and ... TESTING includes Accuplacer and ESL Accuplacer assessment tests for ...

<http://www.montgomerycollege.edu/assessmentcenters> |

Academic calendar. When is Spring break? When are midterm exams? When does the Spring semester begin? <http://cms.montgomerycollege.edu/edu/departments.aspx?id=16456>

ADA Information and Compliance:

<http://cms.montgomerycollege.edu/edu/Department.aspx?id=53990>

Alert Montgomery System. Sign up for Alert Montgomery the official emergency communications service for Montgomery County, MD. During a major crisis, emergency or severe weather event, Montgomery County officials can send event updates, warnings and instructions directly to you on any of your devices. <https://member.everbridge.net/index/1332612387832009#/login>

Code of Conduct. If you have questions regarding behavioral expectations:

<http://cms.montgomerycollege.edu/WorkArea/DAsset.aspx?id=35945>

Counseling & Advising. Academic advising and short term counseling.

<http://cms.montgomerycollege.edu/edu/secondary1.aspx?urlid=4>

Disability Support Services. If you are requesting a reasonable accommodation related to a disability:

<http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=52>

Forms: graduation, involuntary withdraw, change of major, appeals.

<http://cms.montgomerycollege.edu/edu/departments.aspx?id=10072>

Learning Centers and Academic Support Centers. If you are a student who would benefit from tutoring and/or support in reading, writing languages, mathematics, Science, and Technology:

<http://cms.montgomerycollege.edu/learningcenters/>

Safety, Security, & Emergency Operations Plan. Contacts for security offices, Emergency guidelines & procedures, evacuations, Montgomery College Alert, Emergency Guidelines for Individuals with Disabilities,

<http://cms.montgomerycollege.edu/edu/plain2.aspx?id=4087>

Sexual Harassment or Discrimination. Office of Equity and Diversity.

<http://cms.montgomerycollege.edu/edu/Department.aspx?id=65693>