

Course Outline – Plane Trigonometry

Math 141 E – Spring 2015

Class 1 – Monday, January 12

Lecture: Course Overview ([Syllabus](#), [Textbook Info](#), [Calculator Info](#))
[Standard Labeling](#), [Similar Triangles](#)

Also Posted: Review ([Axioms of Real Numbers](#), [Radical Expressions](#),
Solving systems of equations: [Substitution](#), [Elimination](#), The [Quadratic Formula](#))
[Review for Quiz 1](#)

Class 2 – Wednesday, January 14

Lecture: [The Pythagorean Theorem](#)

Class 3 – Wednesday, January 21

Lecture: [Right Triangle Trigonometry](#), [Trig Function Values of Famous Angles](#)

Also Posted: [Simplifying Trig Expressions](#), [Review for Quiz 2](#)

Class 4 – Monday, January 26

Lecture: The Pythagorean Identity, Co-Function Identities, [Trigonometric Identities 1](#) (4.2)

Class 5 – Wednesday, January 28

Lecture: [Arcs and Sectors in Circles](#)

Also Posted: [Review for Quiz 3](#)

Class 6 – Wednesday, February 4

Lecture: [Computing Trigonometric Expressions](#)

Also Posted: [Exam 1 Information](#), [Exam 1 Review](#)

Class 7 – Monday, February 9

Lecture: Review for Exam 1, Rotational Angles, Radian Measure (2.1)

Class 8 – Wednesday, February 11

Exam 1

Class 9 – Wednesday, February 18

Lecture: [Unit Circle Definitions](#) (2.3, 2.5)

Also Posted: [Review for Quiz 4](#)

Class 10 – Monday, February 23

Lecture: [Symmetries of the Unit Circle](#) (2.5), [Trigonometric Equations 1](#) (5.3)

Class 11 – Wednesday, February 25

Lecture: [Trigonometric Identities 2](#), [Trigonometric Equations 4](#)

Also Posted: [Exam 2 Information](#), [Exam 2 Review](#)

Class 12 – Monday, March 2

Lecture: Review for Exam 2, [Graphing Trigonometric Functions - 1](#)

Class 13 – Wednesday, March 4**Exam2**

Also Posted: [Review for Quiz 5](#)

Class 14 – Monday, March 9

Lecture: [Trigonometric Equations 2](#), [Proof of the Sum Formulas](#), [Trigonometric Identities 3](#)

Class 15 – Wednesday, March 4

Lecture: (finished) [Trigonometric Identities 3](#)

Also Posted: [Review for Quiz 6](#)

Class 16 – Monday, March 16

Lecture: [Trigonometric Equations 3](#), [Trigonometric Identities 4](#)

Class 17 – Wednesday, March 18

Lecture: [Law of Sines](#)

Also Posted: [Review for Quiz 7](#)

Class 18 – Monday, March 23

Lecture: Law of Cosines ([Solving Triangles](#))

Class 19 – Wednesday, March 25

Lecture: Review (Solving $\sin 2x = \cos 2x$, slope of the angle bisector)

Class 20 – Monday, April 6

Lecture: Review for Exam 3

Class 21 – Wednesday, April 8

Exam 3

Class 22 – Monday, April 13

Lecture: [Trigonometric Equations 5](#), [Vectors 1](#)

Class 23 – Wednesday, April 15

Lecture: [Half-Angle Formulas](#), [Vectors 1](#) (finished)

Also Posted: [Review for Quiz 9](#)

Class 24 – Monday, April 20

Lecture: [Inverse Functions](#), [Inverse Trigonometric Functions](#)

Class 25 – Wednesday, April 22

Lecture: [Inverse Trigonometric Expressions](#)

Also Posted: [Review for Quiz 10](#), [Exam 4 Information](#), [Exam 4 Review](#)

Class 26 – Monday, April 27

Lecture: [Vectors 2](#), [Vectors 3](#), [Vectors](#)

Class 27 – Wednesday, April 29

Lecture: [Graphing More Trigonometric Functions](#)

Class 28 – Monday, May 4

Lecture: [Product-Sum Identities](#), Final Review

Class 29 – Wednesday, May 6

Final Exam