

Syllabus - MTH 1350 - Analytic Geometry & Trigonometry

Course Coordinator: Glenn Dahl (glenn.dahl@wright.edu)

Prerequisites: MTH 1280, MPL 5

Textbook: (bound or e-book) Algebra and Trigonometry, 4th Edition, by Stewart, Redlin, & Watson.

Online Homework Required: WebAssign (code comes with paperback bound book or can be purchased separately giving access to e-book; previously purchased codes for other courses will not work).

Calculator: TI 81-86 or equivalent required; calculators like the TI-89 which can do symbolic manipulation are not permitted; rentals are available with refundable deposit through the Math Learning Center, 122 Student Success Center (<http://www.wright.edu/university-college/academic-help/math-learning-center>)

Text section	Contact hours	Topic	Suggested Problems
12.1	1	Parabola	5-10,13,17 31,38,49,52,61,62
12.2	2	Ellipse	5-8, 9, 14, 29, 32, 39, 46, 50, 65
12.3	2	Hyperbola	5-8, 9, 18, 22, 30, 38, 39, 56
5.1	1	Angle Measure: Right angle approach	5,13, 17,20 30,35,48,56,59,75
5.2	1	Right Angle Trigonometry	7,8, 13,14,23,24,25,26,33,34,47,58
5.3	2	Trigonometric Functions and Fundamental Identities	3,6,11,20,29,34,35,36,40,41, 47,48, 63,68
5.4	1	Inverse Trigonometric Functions: Right angle approach	3,6,7,11,17,18,23,26,27,30,38,39
6.1	1	Angle Measure: Unit circle approach	3,4,15,16,25,26,
6.2	1	Trigonometric Functions of Real Numbers	5,8,11,14,17,26,31,32,45,46,53,54,80
6.3	2	Graphs of Sine and Cosine with Transformations	10,16,27,28,37,38,41,42,49,50,55 67,83
6.4	2	Graphs of other Trigonometric Functions	9,10,35,37, 49,50,53,54
6.5	1	Graphs of Inverse Trigonometric Functions (Sine, Cosine, Tangent only)	5,6,7,11,12,13,14,17,18,29,30 31,32
6.6	2	Modeling: Harmonic motion	13,16,21,22,23,24,39,419,44,46
7.1	2	Trigonometric Identities	33,37,40,44,49,51,55,59,63,67

7.2	2	Addition and Subtraction Formulas	15,16,21,22,31,34,35,36,42
7.3	2	Double-Angle and Half-Angle Formulas	3,4,19,20,23,24,30,31,37,38
7.3	1	Product-Sum Formulas	55,56,63,64,75,76,85
7.4	2	Trigonometric Equations: Basic	5,6,13,14,17,18,25,30,35,40,45
7.5	1	Trigonometric Equations: More	3,6,9,12,18,21,24,39,40,45,46,53
5.5	1	Law of Sines	5,6,11,12,13,16,19,20,23,24 35,37
5.6	2	Law of Cosines	5,6,9,10,17,18,23,24,29,30 37,43,46
5.6	1	Area of a Triangle: Heron's Formula	33,34,35,36
9.1	2	Vectors	5,6,11,12,19,20,27,28,31,37 41,42,54,63
9.2	2	Dot Product	7,8,15,16,25,26,31,32,35,36 42,47,48

Total Hours: 37

These contact hours can be adjusted up or down at the discretion of the instructor. The remaining 5 hours are for tests and review, as needed.

WEBASSIGN INFORMATION

Students are required to obtain a WebAssign code and add themselves to the instructor's course. The code is either (i) bundled with each new copy of the paperback version of the textbook, or (ii) can be purchased separately, automatically providing access to the e-book version of the text. **NOTE: THE WebAssign CODE IS GOOD FOR THE LIFETIME OF USE OF THE MOST CURRENT EDITION** (now the 4th edition) of the textbook. If students purchase a used bound copy of the textbook, the WebAssign code will probably not be valid (since the previous owner would have used it), so access to WebAssign will still need to be purchased. **Instructors** will have the Stewart book added to their WebAssign profiles. The course coordinator will provide pre-made WebAssign assignments for use throughout the course as well as chapter reviews. The instructors need to set their own due dates for these assignments, and although they may use only these pre-made assignments, they have the option to delete or add problems to the assignments.