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

Prerequisites: Math1280, MPL 40
Textbook: (bound or e-book) Algebra and Trigonometry by Stewart, Redlin, \& Watson. Fourth Edition
Online Homework: 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, https://www.wright.edu/student-success/academic-support/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 | $\begin{aligned} & 3,6,11,20,29,34,35,36,40,41,47,48 \\ & 63,68 \end{aligned}$ |
| 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 | $\begin{aligned} & 10,16,27,28,37,38,41,42,49,50,55 \\ & 67,83 \end{aligned}$ |
| 6.4 | 2 | Graphs of other <br> Trigonometric Functions | 9,10,35,37, 49,50,53,54 |
| 6.5 | 1 | Graphs of Inverse Trigonometric <br> Functions (Sine, Cosine, Tangent only) | $\begin{aligned} & 5,6,7,11,12,13,14,17,18,29,30 \\ & 31,32 \end{aligned}$ |
| 6.6 | 2 | Modeling: Harmonic motion | 13,16,21,22,23,24,39, 41,44,46 |


| 7.1 | 2 | Trigonometric Identities | 33,37,40,44,49,51,55,59,63,67 |
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| 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 | $\begin{aligned} & 5,6,11,12,13,16,19,20,23,24 \\ & 35,37 \end{aligned}$ |
| 5.6 | 2 | Law of Cosines | $\begin{aligned} & 5,6,9,10,17,18,23,24,29,30 \\ & 37,43,46 \end{aligned}$ |
| 5.6 | 1 | Area of a Triangle: Heron's Formula | 33,34,35,36 |
| 9.1 | 2 | Vectors | $\begin{aligned} & 5,6,11,12,19,20,27,28,31,37 \\ & 41,42,54,63 \end{aligned}$ |
| 9.2 | 2 | Dot Product | $\begin{aligned} & 7,8,15,16,25,26,31,32,35,36 \\ & 42,47,48 \end{aligned}$ |
| 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: If the instructor chooses to use WebAssign (it is optional), then 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 $4^{\text {th }}$ 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 can 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.

