

MAT 112 Syllabus

Required Text: *Algebra & Trigonometry: Enhanced with Graphing Utilities*, 5th ed., Sullivan and Sullivan

Additional Resources:

1. The **Student Solutions Manual** for the text is optional. It is available in printed form (free if purchased bundled with a new text) or online (free when purchased with MyMathLab).
2. A **graphing calculator** is required. Instructor use of the TI-84 calculator will be integrated into the teaching of the course. The TI-84 is, therefore, highly recommended for student acquisition, but any student who already owns and knows how to use a different but equivalent graphing calculator may use it for the course.

Course Outline:

Topics from trigonometry and algebra include trigonometric functions, identities and equations; zeros of polynomials, mathematical induction; sequences.

Notes:

- Remember that **no** tests may be given during the final week of class.
- Enrollment in MAT 112 requires a placement code of 4 or higher or successful completion of MAT 111.
- No credit is granted for MAT 112 after completion of MAT 115 or a mathematics course numbered 152 or higher with a grade of C- or better.

Algebra and Trigonometry: Enhanced with Graphing Utilities

Course Outline:

The sections listed below should be covered. The stated number of lecture days to cover each chapter is only a suggestion.

CHAPTER	Title	Sections	MWF	TR
5	The Zeros of a Polynomial Functions	5.5, 5.6	4	2
7	Trigonometric Functions	7.1 – 7.8	11	7
8	Analytic Trigonometry	8.1 – 8.5, 8.7, 8.8	9	7
9	Applications of Trigonometric Functions (Section 9.5 is optional)	9.1 – 9.5	6	4
10	The Complex Plane; De Moivre's Theorem	10.3	1	1
13	Sequences; Induction; Binomial Theorem	13.1 – 13.5(omit 13.4)	4	2
Total Presentations Hours			35	23
Review Hours			3	2
Test Hours			3	3
End of Session Review			1	1
Total Hours			42	29