# MATH 1110/1115 (Accelerated) Addendum to MATH 1110 Syllabus

## Course Objectives:

The course provides a seamless transition into a traditional analysis-based calculus curriculum. Its primary purpose is to thoroughly introduce students to the elementary properties of the transcendental functions encountered in calculus, e.g., the exponential function, the logarithm, and the trigonometric functions. The course is also designed to build mathematical maturity.

## Student Learning Outcomes:

1. Graph polynomial functions using transformations

2. Recognize the real and complex zeros of a polynomial and their multiplicity

3. Examine the graph of parent functions

4. Utilize equations and models to solve applied problems

5. Review reasonableness of solutions to applied problems

6. Solve algebraic, exponential, logarithmic and trigonometric equations

7. Create exponential growth and decay models

8. Use fundamental identities of trigonometric functions for equation solving

9. Develop equations of conic sections

10. Draw the graph of polynomial, rational, exponential, logarithmic, and trigonometric functions and their inverses

## Core Learning Outcomes:

1. Apply mathematical concepts and principles to solve problems.

2. Differentiate among multiple representations of mathematical information.

3. Assess mathematical reasonableness and consistency.

## Assignments: The following lessons are considered part of the accelerated students’ overall grade. **Note** the College algebra assignments are to be completed in the students’ original college algebra course.

Units 3 and 4 in College Algebra – Lessons: 5.2 – 5.6 and 6.1 – 6.7

Units 3 and 4 in Pre-calculus – Lessons 7.1 – 7.4, 8.1 – 8.3 and 9.1 – 9.3, 9.5

Exams – MATH 1110 chapters 5, 6, Final Exam, MATH 1115 Chapter 7 exam, Final Exam

## Grading Criteria

**Lessons** – 35%

**Unit Exams & College Algebra Final** – 25%; This includes your MATH 1110 Grades from Chapters 5 and 6 plus MATH 1110 Final. Note: the number of scores will depend on your MATH 1110 course. Some students may have only had a midterm and final, others may have had additional exams.

For *all* students, this portion includes the Chapter 7 Exam in MATH 1115

**Final Exam for Pre-calculus** – 40%

## Testing Policy:

For the Unit 5 exam on Chapter 7, please schedule this with a tutor using Navigate. Be sure to note in your appointment that you will be taking a Pre-calculus test in My Open Math. The Math Zone staff should have the passwords. For the MATH 1115 final, plan to take it with your MATH 1110 class final. Confirm with your instructor.

## Final Grade in Banner

Upon successful completion of the above criteria, i.e. an overall grade of 73% or higher, your course enrollment in Banner will be changed to MATH 1115 and a final grade will be assigned accordingly. If successful, you will not have MATH 1110 on your transcript.