



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: College Algebra
Course Number: MTH125

Required Materials

Textbook(s): Precalculus- A Right Triangle Approach, 5th edition; Ratti, McWaters, Skrzypek, Bernards, & Fresh; Pearson, 2023
 ISBN (Instant Access): 9780137519217

Required Readings: None

Additional Materials: A graphing calculator is required

Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

16 Week Calendar

Week	Chapter/Topic/Lab
1	Read Start Here! Material on Brightspace Navigate Brightspace (Become Comfortable with Course Structure) Syllabus Quiz Orientation Activity
2	Read notes & watch videos for 2.1, 2.2 & 2.3 Lesson 2.1 Coordinate plane, Distance & Midpoint Formula Lesson 2.2 Graphs of equations Lesson 2.3 Linear equations Homework 2.1 Homework 2.2 Homework 2.3 Unit 1 Quiz A (Covers sections 2.1, 2.2, & 2.3)
3	Read notes & watch videos for 8.1, 8.2, & 8.4 Lesson 8.1 Systems of equations in two variables Lesson 8.2 Systems of equations in three variables Lesson 8.4 Systems of nonlinear equations Linear Modeling Activity Homework 8.1 Homework 8.2 Homework 8.4

Week	Chapter/Topic/Lab
4	Continue to read notes & watch videos for 8.1, 8.2, & 8.4 Unit 1 Quiz B (Covers sections 8.1, 8.2, & 8.4) Unit 1 Test (Covers sections 2.1, 2.2, 2.3, 8.1, 8.2, & 8.4)
5	Read notes & watch videos for 2.4, 2.5, & 2.6 Lesson 2.4 Relations and functions Lesson 2.5 Properties of functions Lesson 2.6 A library of common functions Homework 2.4 Homework 2.5 Homework 2.6 Unit 2 Quiz A (Covers 2.4, 2.5, & 2.6)
6	Read notes & watch videos for 2.7, 2.8, & 2.9 Lesson 2.7 Transformations of functions Lesson 2.8 Combining functions (exclude rational functions); composite functions (exclude rational functions) Lesson 2.9 Inverse functions Homework 2.7 Homework 2.8 Homework 2.9
7	Continue to read notes & watch videos for 2.7, 2.8, & 2.9 Unit 2 Quiz B (Covers 2.7, 2.8, & 2.9) Unit 2 Test (Covers sections 2.4, 2.5, 2.6, 2.7, 2.8, & 2.9)
8	Read notes & watch videos for 3.1, 3.2, & 3.3 Lesson 3.1 Quadratic functions Lesson 3.2 Polynomial functions Lesson 3.3 Long division, synthetic division, Remainder & Factor Theorems Homework 3.1 Quadratic Modeling Activity Homework 3.2 Homework 3.3 Unit 3 Quiz A (Covers 3.1, 3.2, 3.3)
9	Read notes & watch videos for 3.4 & 3.5 Lesson 3.4 Zeros of polynomials Lesson 3.5 Complex zeros of polynomials Polynomial Modeling Activity Homework 3.4 Homework 3.5 Unit 3 Quiz B (Covers 3.4 & 3.5)
10	Read notes & watch videos for 1.5, 2.8R, 2.5R, & 2.9R Lesson 1.5 Solve rational equations Lesson 2.8 R Combine & compose rational functions Lesson 2.5 R Average Rate of Change & Difference Quotient Lesson 2.9 R Inverse rational functions Unit 3 Test (Covers sections 3.1, 3.2, 3.3, 3.4 & 3.5) Homework 1.5 Homework 2.8 R Homework 2.5 R Homework 2.9 R
11	Read notes & watch videos for 1.6, 1.7, & 3.6 Lesson 1.6 Solve polynomial & rational inequalities Lesson 1.7 Solve absolute value equations & inequalities Lesson 3.6 Rational functions Unit 4 Quiz A (Covers 1.5, 2.8 R, 2.5 R, & 2.9 R) Homework 1.6 Homework 1.7

Week	Chapter/Topic/Lab
	Homework 3.6
12	Continue to read notes & watch videos for 1.6, 1.7, & 3.6 Unit 4 Quiz B (Covers 1.6, 1.7, & 3.6) Rational Modeling Activity Unit 4 Test (Covers sections 1.5, 2.8 R, 2.5 R, 2.9 R, 1.6, 1.7, & 3.6)
13	Read notes & watch videos for 4.1 & 4.2 Lesson 4.1 Exponential functions, graphs, and transformations Lesson 4.2 Logarithmic functions, graphs, and transformations Homework 4.1 Homework 4.2 Unit 5 Quiz A (Covers 4.1 & 4.2)
14	Read notes & watch videos for 4.3 & 4.4 Lesson 4.3 Rules of logarithms Lesson 4.4 Solve exponential & logarithmic equations & inequalities Exponential Modeling Activity Homework 4.3 Homework 4.4 Unit 5 Quiz B (Covers 4.3 & 4.4)
15	Prepare and Study for Final Exam (spread out over time) Logarithmic Modeling Activity Unit 5 Test (Covers sections 4.1, 4.2, 4.3 & 4.4) Preparatory Quiz for Final Exam
16	Prepare and Study for Final Exam (spread out over time) Final Exam

8 Week Calendar

Week	Chapter/Topic/Lab
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7	Read notes & watch videos for 4.1 & 4.2 Lesson 4.1 Exponential functions, graphs, and transformations Lesson 4.2 Logarithmic functions, graphs, and transformations Homework 4.1 Homework 4.2 Unit 5 Quiz A (Covers 4.1 & 4.2) Read notes & watch videos for 4.3 & 4.4 Lesson 4.3 Rules of logarithms Lesson 4.4 Solve exponential & logarithmic equations & inequalities Exponential Modeling Activity Homework 4.3 Homework 4.4 Unit 5 Quiz B (Covers 4.3 & 4.4)
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