

SEMESTER PACING GUIDE

Feel free to rearrange topic order to fit your needs.

Week 1 (ACT Math)

ACT Math Introduction

Right Triangles - Pythagorean Theorem Video with NT Guide

- Setting up the Pythagorean Theorem
- Recognizing Pythagorean Triples
- Recognizing Pythagorean Triples (Scaled)
- 45-45-90 and 30-60-90 Triangles w/ Video & NT Guide
- Right Triangles Final Quiz

Distance and Midpoint Video with Note-taking Guide

- Midpoint: Number Line
 - Midpoint: Coordinate Plane
 - Distance: Number Line
 - Distance: Coordinate Plane
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Week 2 (ACT Math)

Substitution Video with Note-taking Guide

- Substitution: Polynomials and Absolute Value
- Substitution: Rationals and Exponentials
- Substituting and Solving
- Substituting an Expression
- Substitution: Functions of Two Variables

Linear Relationships Video with Note-taking Guide

- Linear Relationships and Slopes
 - Linear Relationships and Tables
 - Linear Relationships and Graphs
 - Linear Modeling
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Week 3 (ACT Math)

Perimeter and Area Video with Note-taking Guide

- Perimeter and Circumference
- Arc Length
- Finding Dimensions
- Area – Simple
- Area for Pros

Angles Video with Note-taking Guide

- Triangles – Interior Angles
 - Polygons – Interior Angles
 - Vertical Angles and Linear Pairs
 - Angles Final Quiz
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Week 4 (ACT Math)

Right Triangle Trigonometry Video with Note-taking Guide

- Setting Up Trig Ratios
- Trig Ratios: Find Missing Length
- Trig Ratios: Real World Scenarios

Laws of Sines and Cosines Video with Note-taking Guide

- Setting Up the Law of Sines
- Setting Up the Law of Cosines
- Solving with the Laws of Sines and Cosines

Circle Trigonometry Video with Note-taking Guide

- Circle Trigonometry
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**Week 5
(ACT Math)**

Measures of Central Tendency - Average Video with NT Guide

Average (Simple)
Weighted Average
Average: Missing Score
Median

Probability Video with Note-taking Guide

Single Event
Multiple Events
Conditional Probability
Expected Value

**Week 6
(ACT Math)**

Solving Equations

Solving Linear Equations—Video, NT Guide, Quiz
Solving Polynomials Equations—Video, NT Guide, Quiz
Solving Absolute Value Equations—Video, NT Guide, Quiz

Systems of Equations

Systems – Elimination
Systems – Substitution
Systems – Graphing
Systems – Final Quiz

Rational Expressions

Factoring—Video, NT Guide, Quiz
Rational Expressions—Video, NT Guide, Quiz

Exponential Expressions and Equations

Properties of Exponents—Video, NT Guide, Quiz
Solving Exponential Equations—Video, NT Guide, Quiz

Logarithmic Expressions and Equations

Properties of Logarithms—Video, NT Guide, Quiz
Solving Logarithmic Equations—Video, NT Guide, Quiz

**Week 7
(ACT Math)**

Numbers and Arithmetic Less Frequently-Tested Topics

Unit Rate
Percentages
Proportions

Statistics and Probability Less Frequently-Tested Topics

The Multiplication Principle
Factorials
Permutations

Algebra Less Frequently-Tested Topics

Distributive Property
Conic Sections
Matrices – Addition, Scalar Multiplication, and Determinants
Matrix Multiplication

Geometry Less Frequently-Tested Topics

Similar Figures
3-D Surface Area and Volume
Vectors in Component Form
Vectors into Unit Vector Form

Week 8 (ACT Math)

Math Final Quizzes

Math Final Quizzes – Levels 1-6

**Week 9
(ACT English)**

ACT English Introduction
Subject-Verb Agreement Video with Note-taking Guide
 Basic Subject-Verb Agreement
 Subject-Verb Separation
 Matching Verb Tense
 Subject-Verb Agreement Final Quiz

Punctuation Video with Note-taking Guide
 Connecting with Commas
 Semicolons
 Colons
 Dashes
 Extraneous Punctuation
 Punctuation Final Quiz

**Week 10
(ACT English)**

Commas Video with Note-taking Guide

Introductory Elements
 Commas and Adjectives
 Commas and Interrupters
 Extraneous Commas
 Avoiding Comma Splices
 Commas Final Quiz

Transitions Video with Note-Taking Guide

Similar Ideas
 Contrasting Ideas
 Cause-and-Effect
 Additional Information
 Transitions Final Quiz

**Week 11
(ACT English)**

Redundancy Video with Note-taking Guide

Redundancy with Synonyms
 Redundancy with Definitions
 Redundancy Final Quiz

Misplaced Modifiers Video with Note-taking Guide

Avoid Dangling Modifiers
 Misplaced Modifiers

**Week 12
(ACT English)**

Pronoun-Antecedent Agreement Video with Note-taking Guide

Pronouns and Antecedents
 Who or Whom

Possessive Forms Video with Note-taking Guide

Possessive Forms Quiz

Adjectives and Adverbs Video with Note-taking Guide

Adjectives and Adverbs Quiz

**Week 13
(ACT English)**

English – Global Items Video with Note-taking Guide

Deletion Quiz
 Addition Quiz
 Split into 2 Paragraphs Quiz
 Placement Quiz
 Purpose Quiz

English Final Quizzes

English Final Quizzes 1-3

**Week 14
(ACT Reading)**

ACT Reading Introduction
Direct from Text Video w/ Note-taking Guide
 Quizzes 1, 2, 3, and Final Quiz
Meaning from Context Video w/ Note-taking Guide
 Quizzes 1, 2, and Final Quiz
Inferences Video w/ Note-taking Guide
 Quizzes 1, 2, and Final Quiz
Point of View Video w/ Note-taking Guide
 Quizzes 1, 2, 3, and Final Quiz
Summary Items Video w/ Note-taking Guide
 Quizzes 1, 2, 3, 4, and Final Quiz
Writing Techniques Content
 Quizzes 1, 2, and Final Quiz

**Week 15
(ACT Reading)**

Prose Fiction Video w/ Note-taking Guide, Quizzes 1, 2, and 3
Social Science Video w/ Note-taking Guide, Quizzes 1 and 2
Humanities Video w/ Note-taking Guide, Quizzes 1, 2, and 3
Natural Science Video w/ Note-taking Guide, Quizzes 1, 2, and 3
Double Passages Video w/ Note-taking Guide, Quiz 1

**Week 16
(ACT Science)**

ACT Science Introduction
Reading Tables
 Reading Tables Quiz
 Relationships in Tables Quiz
 Making Predictions from Tables Quiz
Reading Graphs
 Reading Graphs Quiz
 Relationships in Graphs Quiz
 Making Predictions from Graphs Quiz

**Week 17
(ACT Science)**

Data in Different Forms with Quiz
Identifying Maxima and Minima with Quiz
Analyzing Experiments with Quiz
Evaluating Hypotheses with Quiz
Multiple Y-Axes with Quizzes 1, 2, and 3
Vertical Axis Input Values with Warmup Quiz and Final Quiz
Utilizing Multiple Data Sources
 Utilizing Text with Data
 Utilizing Multiple Data Sources
ACT Science Final Quizzes
 Science Final Quiz 1
 Science Final Quiz 2
 Science Final Quiz 3
 Conflicting Viewpoints Passage

**Week 18
(Practice Tests)**

2021-2022 Preparing for the ACT Guide (See “Getting Started” section of the course)
 ---English Practice Test w/ student scoring
 ---Math Practice Test w/ student scoring
 ---Reading Practice Test w/ student scoring
 ---Science Practice Test w/ student scoring
