ACES Academic Enrichment Center



# 2019 Summer Enrichment Course Syllabus

## Course Name: S100M: SAT Foundations – Math

#### **Course Description**

ACES SAT Foundations provides a first entry-point for students interested in preparing for the new SAT test. The course covers the structure of the new test, including question types and scoring, highlighting differences between the old SAT and the new one. The course also covers general test-taking strategies and development of a personal plan-of-action for test preparation. This course also includes a review of tested math content: Heart of Algebra through Passport to Advanced Math.

## **Course Objectives and Student Competencies**

- Students will learn the structure of the SAT test
- Students will learn general and SAT-specific test-taking strategies
- · Students will develop a personal plan-of-action to prepare for the SAT
- Students learn specific content tested in the Math section

#### **Class Structure**

The SAT Foundations course is a lecture-based class designed to help students learn as much material in as short a time as possible. Thus, the course consists of an accelerated lecture-based overview. There is, however, time allotted to take SAT test sections, analyze errors, and develop personal strategies for success.

#### **Class Assignments**

Students will take SAT sections each week for homework and also complete skillbuilding exercises for each section of the test.

# **Course Schedule:**

Date	Subject	Topics	Strategies	Homework
Day 1	Diagnostic Test	Review of Diagnostic Test and question analysis Overview of SAT Math Test SAT Format, Math section Question Types and Scoring rules	Assessment of individual strengths and weaknesses	SAT Section #1
Day 2	Heart of Algebra	Arithmetic and Algebra Expressions, Absolute values	Substitution Recognizing and eliminating distractors	SAT Section #2
Day 3	Heart of Algebra	Linear Equations and inequalities The relationships among linear equations, lines in the coordinate plane	Avoid careless mistakes Time- management	SAT Section #3
Day 4	Problem Solving and Data Analysis	Ratio and Proportion, Exponential Growth, Probability and statistics	Understanding Tables, Charts, and Diagrams	SAT Section #4
Day 5	Passport to Advanced Math	Understand functions Rational expressions Polynomials	Calculator Strategies	SAT Section #5
Day 6	Passport to Advanced Math	Rational numbers, Logarithms, Graphing, Sequences and Series, Trigonometry	Make an educated guess	SAT Section #6
Day 7	Additional Topics in Math	Geometry, Complex Numbers, Absolute Value, Unit Conversions	Pacing Tips for Test Day	SAT Section #7
Day 8	Diagnostic Test	Review and Scoring the Test and question analysis	Analyzing strengths and weaknesses, making a study plan	Make future SAT Study Plan