

# **ACES Learning Center Course Syllabus**

## **SAT 100M: SAT Foundations of Mathematical Reasoning**

### **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 skill-building exercises for each section of the test.

## Course Schedule:

<b>Date</b>	<b>Subject</b>	<b>Topics</b>	<b>Strategies</b>	<b>Homework</b>
Week 1	Overview & Test-Taking Strategies	Format of the 2016 SAT Analyzing strengths and weaknesses, Making a study plan	Recognizing and eliminating distractors	Complete Study Plan SAT Section #1
Week 2	Heart of Algebra	Arithmetic and Algebra	Substitution	SAT Section #2
Week 3	Problem Solving and Data Analysis	Ratio and Proportion, Exponential Growth, Probability	Understanding Tables, Charts, and Diagrams	SAT Section #3
Week 4	Passport to Advanced Math	Rational numbers, Logarithms, Graphing, Sequences and Series, Trigonometry	Calculator Strategies	SAT Section #4
Week 5	Additional Topics in Math Final Practice Test	Geometry, Complex Numbers, Absolute Value, Unit Conversions	Pacing Tips for Test Day	Course Evaluation