

Santa Barbara Unified School District
NEW COURSE APPROVAL

I. The teacher proposing the new course of approval will submit this completed form to the Assistant Superintendent, Secondary Education on or by _____.

II. If a new textbook needs to be purchased for the new course, please remember to complete the 'Request for Textbook Adoption (Non- Primary State Adoption)' form.

III. Description of Proposed Course.

Before you complete this form, please make sure that you have considered the following questions:

- *Is there a similar course already being taught at another site?*
- *Have I looked through the district course catalog to make sure that the course doesn't already exist?*

- A. Title of course **CCSS Math 7 Plus Enrichment**
B. Length of course (semester, year long) **Year Long**
C. Targeted population (please circle all that apply)
Special Education GATE English Language Learners
D. Description of the standards taught in the course.
See attached course description

If you need more room to answer the questions than what is allotted, please continue onto an additional sheet of paper and attach to form.

- E. What A-G requirement does it fulfill? (High School Course only) **N/A**
F. Does the course have targeted ability level? If so, what is the designation of the course? (AP, Honors, College Prep) _____
G. Explain the rationale for the creation of the course. What need does it fulfill?
This is a new course that addresses the Common Core Math 7 standards and is intended for students who demonstrate a need for mathematical experiences and topics beyond CCSS Math 7. It is designed to address all of the CCSS Math 7 content and math practices while providing students additional enrichment opportunities to increase students' depth of understanding by developing expertise in the modeling process and applying mathematics to novel and complex contexts.

- H. Describe the instructional materials used. Include the cost of instructional materials. **A team of district math teachers is in the process of gathering instructional materials for this course from both currently adopted instructional materials and new resources aligned to Common Core Standards. The course is designed around the scope and sequence created by the Georgia Department of Education. The Georgia mathematics units of instruction are developed under a grant from the U.S. Department of Education.**

- I. Describe any other costs associated with the course. What will be your source of funding for these materials? **There will be additional costs associated with photocopying materials for students and student learning materials (i.e. manipulatives, technology tools).**

- J. What is the targeted grade level of this course? **7th grade** Justification for targeted grade level **The course is based on the 7th Grade Common Core math standards.**

- K. Describe how this course fits into the sequence of courses already being offered at your site. **This course will be a part of a new series of math courses that are designed to address the Common Core State Standards for Mathematics.**

- L. What credential(s) are required to teach this course? **Single Subject Mathematics credential**
Additional training? **No**

- M. Are there any partnerships with outside agencies? (businesses, community programs, colleges, grants). If yes, please explain. **None**

IV. Site Level Approval Signatures

Teacher Proposing Course

Date

Department Chair

Date

Additional Teacher (Same Department)

Date

Head Counselor

Date

Principal

Date

- V. After obtaining signatures, please forward this document to the Assistant Superintendent, Secondary Education at the District Office.

Assistant Superintendent, Secondary Education

Date _____

CCSS Mathematics 7 Plus Enrichment

Math 7 Plus Enrichment focuses on the same Common Core State Standards content standards as Math 7 (listed below), and includes additional topics and assignments (e.g., projects) that allow students the opportunity to connect their learning to other disciplines. These “enrichment opportunities should allow students to increase their depth of understanding by developing expertise in the modeling process and applying mathematics to novel and complex contexts.” (Massachusetts 2012).

The CCSS Math 7 Plus Enrichment course will contain extra topics not included in Math 7. These topics include elements from mathematics and applications in other disciplines that would be interesting to advanced middle school students. In addition, students in the Plus Enrichment course will have increased opportunities to model contextual situations with the mathematics at their grade level. The course have increased rigor and advanced content that will challenge the minds of high ability students.

In Math 7, instructional time should focus on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

- 1. Students extend their understanding of ratios and develop understanding of proportionality to solve single- and multi-step problems. Students use their understanding of ratios and proportionality to solve a wide variety of percent problems, including those involving discounts, interest, taxes, tips, and percent increase or decrease. Students solve problems about scale drawings by relating corresponding lengths between the objects or by using the fact that relationships of lengths within an object are preserved in similar objects. Students graph proportional relationships and understand the unit rate informally as a measure of the steepness of the related line, called the slope. They distinguish proportional relationships from other relationships.
- 2. Students develop a unified understanding of number, recognizing fractions, decimals (that have a finite or a repeating decimal representation), and percents as different representations of rational numbers. Students extend addition, subtraction, multiplication, and division to all rational numbers, maintaining the properties of operations and the relationships between addition and subtraction, and multiplication and division. By applying these properties, and by viewing negative numbers in terms of everyday contexts (e.g., amounts owed or temperatures below zero), students explain and interpret the rules for adding, subtracting, multiplying, and dividing with negative numbers. They use the arithmetic of rational numbers as they formulate expressions and equations in one variable and use these equations to solve problems.
- 3. Students continue their work with area from Grade 6, solving problems involving the area and circumference of a circle and surface area of three-dimensional objects. In preparation for work on congruence and similarity in Grade 8 they reason about relationships among two-dimensional figures using scale drawings and informal geometric constructions, and they gain familiarity with the relationships between angles

formed by intersecting lines. Students work with three-dimensional figures, relating them to two-dimensional figures by examining cross-sections. They solve real-world and mathematical problems involving area, surface area, and volume of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes and right prisms.

- 4. Students build on their previous work with single data distributions to compare two data distributions and address questions about differences between populations. They begin informal work with random sampling to generate data sets and learn about the importance of representative samples for drawing inferences.

Math 7 Overview

- **Ratios and Proportional Relationships**

- Analyze proportional relationships and use them to solve real-world and mathematical problems.

- **The Number System**

- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

- **Expressions and Equations**

- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

- **Geometry**

- Draw, construct and describe geometrical figures and describe the relationships between them.
- Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

- **Statistics and Probability**

- Use random sampling to draw inferences about a population.
- Draw informal comparative inferences about two populations.
- Investigate chance processes and develop, use, and evaluate probability models.

- **Mathematical Practices**

- . 1. Make sense of problems and persevere in solving them.
- . 2. Reason abstractly and quantitatively.
- . 3. Construct viable arguments and critique the reasoning of others.
- . 4. Model with mathematics.
- . 5. Use appropriate tools strategically.
- . 6. Attend to precision.
- . 7. Look for and make use of structure.
- . 8. Look for and express regularity in repeated reasoning.