



OFFICE OF CURRICULUM, INSTRUCTION, & PROFESSIONAL DEVELOPMENT

HIGH SCHOOL COURSE OUTLINE

Department	Mathematics	Course Title	Geometry 1-2 SDAIE		Course Code	3036	
Abbreviation	Geometry 1-2 SDA	Grade Level	8,9,10,11,12		Grad Requirement	No	
Course Length	2 semesters	Credits/Semester	5	Required	No	Elective	X
Prerequisites	C or better in Algebra 1-2						
Co-requisites	ELD English 3 or 4		Teacher Certification		CLAD, LDS, or SB 1969		
Articulated with LBCC	No		Articulated with CSULB		No		
Meets UC "a-g" Requirement	Yes (c)		Meets NCAA Requirement		Yes		

COURSE DESCRIPTION:

Geometry SDAIE is designed for English Language Learners who are at the Beginning, Early Intermediate and Intermediate levels of oral, reading and writing in English. English Language Learners in this SDAIE course cover the same content and utilize the same basic textbook as their Fluent English Speaker counterparts. The course varies in the pacing, instructional methodology and supplemental materials used which are designed to provide depth vs. breadth of the content standards, more comprehensible input, primary language support, and literacy development through the content area.

The course consists of a study of lines, planes, space, angles, curves, figures, and transformations. Basic ideas are introduced through concepts of sets of points with extensions into three dimensions. Coordinate geometry is formalized.

GOALS: (Student needs the course is intended to meet)

Students will learn all of the California State Standards for Geometry. The geometry skills and concepts developed in this discipline are useful to all students. Aside from learning these skills and concepts, students will develop their ability to construct formal, logical arguments and proofs in geometric settings and problems.

Students communicate precisely about quantities, logical relationships, and unknown values through the use of signs, symbols, models, graphs, and mathematical vocabulary. Regular opportunities are provided for students to communicate through oral and written explanations of math concepts.

Students learn to apply mathematics to everyday life and develop an interest in pursuing advance studies in mathematics and in a wide array of mathematically related career choices.

CONTENT STANDARDS

- 1.0* Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning. (CST)
- 2.0* Students write geometric proofs, including proofs by contradiction. (CST)
- 3.0* Students construct and judge the validity of a logical argument and give counterexamples to disprove a statement. (CST) (PSAT)
- 4.0* Students prove basic theorems involving congruence and similarity. (CST)
- 5.0 Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles. (CST) (PSAT)
- 6.0 Students know and are able to use the triangle inequality theorem. (CST) (PSAT)
- 7.0* Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles. (CST) (PSAT)
- 8.0* Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures. (CST) (PSAT)
- 9.0 Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres; and students commit to memory the formulas for prisms, pyramids, and cylinders. (CST) (PSAT)
- 10.0* Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids. (CST) (PSAT)
- 11.0 Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids. (CST) (PSAT)
- 12.0* Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems. (CST) (PSAT)
- 13.0 Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles. (CST) (PSAT)
- 14.0* Students prove the Pythagorean theorem. (CST)
- 15.0 Students use the Pythagorean theorem to determine distance and find missing lengths of sides of right triangles. (CST) (PSAT)
- 16.0* Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line. (CST)
- 17.0* Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles. (CST)
- 18.0* Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them. For example, $\tan(x) = \sin(x)/\cos(x)$, $(\sin(x))^2 + (\cos(x))^2 = 1$. (CST)
- 19.0 Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side. (CST)
- 20.0 Students know and are able to use angle and side relationships in problems with special right triangles, such as 30°, 60°, and 90° triangles and 45°, 45°, and 90° triangles. (CST) (PSAT)
- 21.0* Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, and inscribed and circumscribed polygons of circles. (CST)
- 22.0* Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections. (CST) (PSAT)

* Key standards (*Mathematics Framework for California Public Schools*) comprise a minimum of 70% of the California Standards Test

CST Standard assessed on the California Standards Test

PSAT Standard assessed on the Preliminary Scholastic Aptitude Test

Academic Literacy in SDAIE Content-Area Classes for ELLs at Levels 3 and 4L

The ELD Standards of reading, writing, listening and speaking describe the linguistic pathway that ELLs take to achieve academic literacy in English. SDAIE content area classes play an important role in developing and strengthening students' progress towards this goal. Students should be encouraged to expand their English skills, even though grammatical and vocabulary approximations will occur during this process.

When content-area information and materials have been made comprehensible through instruction in the SDAIE class, ELLs at each level will progress through the following phases of developing academic literacy in English. The students' degrees of literacy in their primary language will significantly affect the pace that students move through these levels.

ELD Level 3

Upon entering ELD Level 3, students are increasing their control of academic English proficiency about topics that have been explicitly taught to them and some topics that may be new to them. There will be wide gaps in vocabulary. ELLs progressing through this level will:

- participate in group/class projects, discussions and presentations with simple sentences and complex sentences (with increasing accuracy and fluency when given modeling and constructive feedback)
- use content area reading strategies (especially pre-reading, KWL, academic participation cards, anticipation guides, Reciprocal Teaching and Question/Answer Relationships) to analyze concepts from taught texts and other course reading materials. By the end of level 3, ELLs are able to comprehend most texts written at 4th grade level. Students continue to need extensive modeling and direct instruction, especially when encountering figurative language and sentences with numerous clauses.
- respond to Curriculum Embedded Assessment prompts (read to them and clarified for them as needed) orally and with simple and complex sentence structures
- use writing in a variety of ways such as, but not limited to, class note-taking, learning logs, interactive notebooks, response logs, and completing student handouts, homework, and class projects. Students continue to need extensive modeling and direct instruction, especially when writing at differing formality levels for a variety of audiences.
- understand the need for using test-taking strategies (using taught vocabulary) on the required district/state assessments, such as, End of Course Exams (with alternate presentation and response), STAR and Stanford-9.

ELD Level 4L

Upon entering ELD Level 4L, students demonstrate a significant gap between their oral English fluency (high) and their English literacy proficiency (low), even though they have had many years of instruction in English. ELLs progressing through this level will:

- participate in group/class projects, discussions and presentations with sentences that demonstrate conversational English proficiency
- need to be taught how to use content area reading strategies (especially pre-reading, KWL, academic participation cards, anticipation guides, Reciprocal Teaching and Question/Answer Relationships) to analyze concepts from taught texts and other course reading materials. Students need extensive modeling, direct instruction, and oral discussions before, during and after reading.
- respond to Curriculum Embedded Assessment prompts (clarified orally to them as needed). Students need extensive modeling, direct instruction, and oral discussions to move them beyond writing sentences that reflect only conversational English.
- use writing in a variety of ways such as, but not limited to, class note-taking, learning logs, interactive notebooks, response logs, and completing student handouts, homework, and class projects. Students continue to need extensive modeling and direct instruction, especially when writing at differing formality levels for a variety of audiences.
- understand the need for using test-taking strategies on the required district/state assessments, such as, End of Course Exams STAR and Stanford-9.

STATE PERFORMANCE STANDARDS

The California State Board of Education has identified the following performance levels for the California Content Standards Test in Geometry. The objective of Long Beach Unified School District is to have all students achieve at or above the Proficient Performance Standard (Level). The table indicates the scaled score (SS) and estimated percent correct on the Content Standards Test.

Far Below Basic	Below Basic	Basic	Proficient	Advanced Proficient
Less than 31%	34% - 51%	52% - 68%	69% - 85%	86% - 100%
SS \leq 246	SS 247 – 299	SS 300 – 349	SS 350 – 417	SS \geq 418

DISTRICT PERFORMANCE STANDARDS

The Long Beach Unified School District has common assessments and assignments that are required for Geometry. The Performance Standard Criteria is shown in the table below. The objective is to have all students achieve at or above the Proficient Level and receive a C or better in the course. Performance level is determined by the average of the Assessments or Assignments.

Mathematics Performance Standard Criteria

Assessment/ Assignments	Not Proficient 1	Partial Proficient 2	Proficient 3	Advanced Proficient 4
Graded Student Work	Average is a 1 or less than 60%	Average is a 2 or 60% - 69%	Average is a 3 or 70% - 84%	Average is a 4 or 85% - 100%
Standards Based Assessment	Less than 60%	60% - 69%	70% - 84%	85% - 100%
Written Response/OEM	1-2	3	4	5-6
End-of-Course Exam	Less than 51%	52% - 68%	69% - 85%	86% - 100%

Mathematics Standard Performance

Performance Level for each unit is determined by the average of the Graded Student Work, Standards Based Test and Open-Ended Math Score. Students record information in the Portfolio during the school year and at the end of the year complete the Overall Standards Performance Graph.

Performance Level	4				
	3.5				
	3				
	2.5				
	2				
	1.5				
	1				
	0.5				
	0				
		Fundamental Terms, Angles, Properties of Real Numbers	Triangles, Congruence, Similarity	Coordinate Geometry, Logic, Transformations	Geometric Figures, Area, Perimeter, Solids

OUTLINE OF CONTENT AND RECOMMENDED TIME ALLOTMENT:

Content sequencing and time allocations are only suggestions and may be adjusted to suit school site curriculum plans and student needs.

Fundamental Terms and Angles

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Recognize and use the fundamental terms of geometry	Recognize the need for undefined terms such as “point, line, and plane” (1.0)	1-2	p. 43, 45, 51	<u>Key Vocabulary:</u> Axiom Point Line Plane Postulate Theorem Line segment Ray Collinear Midpoint <u>Visuals & Demos:</u> Patty paper Straight edge	2 weeks
	Use definitions, postulates, and theorems (3.0)	1-2 End-of-			
Apply properties of coplanar lines to geometric situations	Identify angle relationships involving the properties of parallel lines cut by a transversal (7.0)	3-1 3-2	p. 46 and 47	<u>Key Vocabulary:</u> Transversal Parallel Intersecting Oblique Perpendicular Complement Supplement Angles: Corresponding Alt. Interior Alt. Exterior Consecutive <u>Visuals & Demos:</u> Compass Straight edge Patty paper	2 weeks
	Prove theorems and solve problems related to parallel lines	Chapter 4			
Visualize, sketch, and construct plane and solid geometric figures	Identify figures in a plane and in space	1-5	p. 61	<u>Key Vocabulary:</u> Bisector Angle bisector Perpendicular bis. Segment bis. <u>Visuals & Demos:</u> Protractor Compass Straight edge	2 weeks
	Use geometric figures to communicate ideas and develop proofs (2.0)	2-4 2-5			
	Perform basic constructions with straightedge and compass (such as angle bisectors, perpendicular bisectors, and a line parallel to a given line) (16.0)	1-5 3-7			

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Apply angle and side relationships in geometric figures	Compute the measure of an angle or sum of the angles of polygons (interior and exterior) (12.0)	3-4	p. 22	<u>Key Vocabulary:</u> Polygon Regular Triangle Quadrilateral Pentagon Hexagon Heptagon Octagon Decagon Dodecagon <u>Visuals & Demos:</u> Visual of each shape	1 week

Properties of Real Numbers

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Apply properties of real numbers to geometry	Apply the equality and order properties of the real number system	2-4	p. 23, 46, 52	<u>Key Vocabulary:</u> Real number Integer Reflexive Transitive Symmetric <u>Visuals & Demos:</u> Number line	2 weeks
	Use the properties in calculations based on the measures of segments, angles, and ratios (13.0)	3-1			
	Apply algebra skills to geometric problems	2-5			

Triangles, Congruence, and Similarity

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Demonstrate knowledge and use of similar and congruent geometric figures	Prove theorems using congruency and similar theorems (4.0)	Chapter 4	p. 54, 55, 57, 58, 64, 65, 66, 67	<u>Key Vocabulary:</u> Congruent Similar Proportion Corresp. Pts. Equilateral Isosceles Scalene Acute	3.5 weeks
	Use congruent and similar figures to solve application problems (5.0)	8-2 8-6			

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
	Apply the concept of corresponding parts of triangles	4-7		Obtuse Right Equiangular <u>Visuals & Demos:</u> Visuals of triangles	
Apply angle and side relationships in geometric figures	Apply the triangle Inequality Theorem (6.0)	5-5	p. 21 and 52	<u>Key Vocabulary:</u> Inequality Converse Opposite Adjacent <u>Visuals & Demos:</u> Visuals of triangles	1.5 weeks
	Recognize and use the side-angle inequality relationships in triangles	5-5			

Coordinate Geometry, Logic, and Transformations

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Demonstrate knowledge of various types of reasoning	Compare and apply inductive reasoning (1.0)	Chapter 2	p. 64 and 67	<u>Key Vocabulary:</u> Inductive Deductive Indirect Conclusion <u>Visuals & Demos:</u> Diagrams Flash cards of pertinent theorems	2 weeks
	Use deductive reasoning to arrive at a conclusion (2.0)	2-3			
	Recognize and apply indirect reasoning	2-4			
	Develop direct and indirect proofs	2-5			
Apply geometric concepts to coordinate geometry (in two or three dimensions)	Prove and use the theorems for the midpoint of a line segment and the length of a line segment (17.0)	1-6	p. 38, 46, 47, 61, 62	<u>Key Vocabulary:</u> Coordinates Slope Std. Equation Spheres Hypothesis Conclusion Converse <u>Visuals & Demos:</u> Graph paper Visuals of circles and spheres	3 weeks
	Determine the slope of a line given two points	3-5			
	Graph lines using slope-intercept form and the intercepts Graph horizontal and vertical lines	3-5			
	Write the equation of a line using point-slope form and given two points Write the equation of a horizontal and vertical line	3-5			

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
	Determine the slopes of parallel and perpendicular lines	3-6			
	Recognize, graph, and write equations of circles	11-5			
	Incorporate coordinate information in proofs (17.0)	5-1 6-7			
Demonstrate knowledge of transformational geometry including translations, reflections, rotations, and dilations	(22.0)	Chapter 12	p. 68 and 69	<u>Key Vocabulary:</u> Translation Transformations Reflection Rotation Dilation Isometric Scale factor Symmetry <u>Visuals & Demos:</u> Graph paper Paper & scissors	1 week

Geometric Figures

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Classify geometric figures by their characteristics	Triangles (12.0)	3-3	p. 23 and 51	<u>Key Vocabulary:</u> Equilateral Isosceles Scalene <u>Visuals & Demos:</u> Triangle shapes	
	Quadrilaterals	3-4 6-1		<u>Key Vocabulary:</u> Acute Right Obtuse Equiangular Ext. angle Adjacent angle Diagonal Rhombus Kite Trapezoid Parallelogram Apothem Concave Convex <u>Visuals & Demos:</u> Visuals of polygons	
	Other polygons	3-4			

Circles and Right Triangle Trigonometry

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
Apply the properties of circles and spheres in the solutions of problems	Relationships of chords, secants, tangents, and circle-related angles (21.0)	11-1 to 11-4	p. 32 – 37, 73 - 76	<u>Key Vocabulary:</u> Diameter Radius Chord Secant Tangent Inscribed Circumscribed Circumference Central angle Inscribed Angle <u>Visuals & Demos:</u> Compass Straight edge	3 weeks
	Inscribes and circumscribes polygons	11-1			
Apply trigonometric concepts	Use the Pythagorean Thm (14.0, 15.0)	7-2	p. 24 – 31, 77 - 79		
	Apply theorems relating to properties based on similar triangles, including those formed in right triangles	Chapter 8			
	Recognize and use angle and side relationships of equilateral, isosceles right, and 30°-60°-90° triangles	7-3			
	Identify and use trigonometric ratios (sine, cosine, and tangent) (18.0, 19.0)	9-1 9-2			
	Solving problems using right triangle trig functions	9-3			

Area, Perimeter, and Solids

Topics	Curriculum Objectives California Content Standards	Adopted Textbook Correlation (Prentice Hall)	Assessments <u>Geometry Assessment Portfolio Workbook</u>	Key Vocabulary and Recommended Aids	Time
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Use formulas to solve geometric problems	Use perimeter and area formulas relating to triangles, quadrilaterals, circles, and other polygons Use surface area and volume formulas for cubes, prisms, cylinders, cones, pyramids, and spheres (8.0, 9.0, 11.0)	Chapter 10	p. 39, 83 - 88	Key Vocabulary: Surface area Perimeter Prism Cone Cylinder Pyramid Sphere Volume Right prism Oblique prism Visuals & Demos: Relational Geometric Solids	3 weeks
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APPLICATION OF COURSE CONTENT

Career Connection:

Related Major Skills & Characteristics - Problem Solving , Organizational Skills, Numerical Computation, Ability to Analyze & Interpret Data, Critical Thinking, Computer Literacy, Logical Thinking, Team Skills Efficient, Systemizing Skills, Advanced Quantitative Skills, Testing Skills

Related Career Titles – Students who major in mathematics will be prepared for any of the following careers.

*Accountant *Contract Administrator *Information Scientist *Actuary *Cost Estimator/Analyst *Inventory Control Specialist *Aerospace Engineer *Cryptographer/Cryptologist *Investment Banker *Air Traffic Controller *Data Control Administrator *ISO 2000 Specialist *Applications Programmer *Data Processing Manager *Market Research Analyst *Applied Science Technologist *Database Manager *Mathematician
 *Artificial Intelligence Programmer *Demographer *Media Buyer *Astronomer *Econometrician *Meteorologist
 *Banking/Credit/ Investment Mgr *Economist *Mortgage Researcher
 *Biometrician/ Biostatistician *EDP Auditor *Network Programmer *Commodity Manager *Employee Relations Specialist *Numerical Analyst *Compensation/Benefits Administrator *Engineer *Operations Research Analyst *Computer Consultant *Engineering Lab Technician *Physicist *Computer Engineer *Environmental Technologist *Pollution Meteorologist *Computer Facilities Mgr *Estate Planner *Production Manager *Computer Installation *External Auditor *Production Support Specialist *Computer Marketing/Sales Rep *Financial Auditor *Psychometrician
 *Computer Programmer *Financial Consultant *Public Health Statistician *Computer Scientist *Financial Manager *Purchasing/Contract Agent *Computer-Aided Design Tech. *Hydro Geologist *Quality Assurance Analyst *Consumer Loan/Credit Officer *Hydrologist *Rate Analyst *Cartographer *Software Engineer *Teacher: Science/Math/Computers
 *Research Analyst *Software Support Specialist *Technical Support Rep.
 *Risk & Insurance Specialist *Statistician *Technical Writer *Risk Analyst *Systems Analyst *Transportation Planner
 *Robotics Programmer *Systems Engineer *Treasury Management Specialist *Satellite Communications Specialist *Systems Programmer *Underwriter
 *Software Development Specialist *Urban Planner *Value Engineer *Weight Analyst

SERVICE LEARNING – Students who are Advanced Proficient on the Content Standards Tests or those who are earning an A in the course, can participate in after school tutoring programs to assist other students in learning mathematics. All hours can be credited towards the Service Learning requirement.

METHODS:

Lesson Design & Delivery: Teachers will incorporate these components of lesson design during direct instruction and inquiry activities. The order of components is flexible, depending on the teacher's vision for the individual lesson. For instance, the objective and purpose, while present in the teacher's lesson plan, are not made known to the students at the beginning of an inquiry lesson.

Essential	Anticipatory Set
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Elements of Effective Instruction Model for Lesson Design Using Task Analysis	Objective Standard Reference Purpose Input Modeling Check for Understanding Guided Practice Closure Independent Practice
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Some components may occur once in a lesson, but others will recur many times. Checking for understanding occurs continually; input, modeling, guided practice and closure may occur several times. There may even be more than one anticipatory set when more than one content piece is introduced.

Active Participation: Teachers will incorporate the principles of active participation and specific strategies to ensure consistent, simultaneous involvement of the minds of all learners in the classroom. Teachers should include both covert and overt active participation strategies, incorporating cooperative learning structures and brain research. Some of the possible active participation strategies include:

COVERT	OVERT (Oral)	OVERT (Written)	OVERT (Gestures)
• Recall	• Pair/Share	• Restate in Journals / Notes	• Hand Signals
• Imagine	• Idea Wave	• Response Boards	• Model with Manipulatives
• Observe	• Choral Response	• Graphic Organizers	• Stand up/ Sit down
• Consider	• Give One, Get One	• Folded Paper	• Point to Examples
	• “Foggiest” point	• Ticket Out of Class	
	• Socratic Seminar		
	• Cooperative Discussion Groups (i.e. Talking Chips, Gambit Chips)		

Literacy and Differentiation Strategies

Learning styles and learning challenges of your students may be addressed by implementing combinations of the following:

<u>Reading Strategies in Mathematics</u> <ul style="list-style-type: none"> ▪ Learning Logs ▪ Pre-teaching ▪ Vocabulary ▪ Pre-reading ▪ Text Structures ▪ Trail Markers ▪ Reciprocal Teaching ▪ Functional Text ▪ Anticipation Guide 	<u>SDAIE Strategies for English Learners</u> <ul style="list-style-type: none"> ▪ Tapping/Building Prior Knowledge (Graphic Organizers, Schema) ▪ Grouping Strategies ▪ Multiple Intelligences ▪ Adapt the Text ▪ Interactive Learning (Manipulatives, Visuals) ▪ Acquisition Levels ▪ Language Sensitivity ▪ Lower the Affective Filter (including Processing Time) ▪ Home/School Connection (including Cultural Aspects) 	<u>Differentiation for Advanced Learners</u> <ul style="list-style-type: none"> ▪ Curriculum Compacting ▪ Tiered Assignments ▪ Flexible Grouping ▪ Acceleration ▪ Depth and Complexity ▪ Independent Study
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MATERIALS USED IN TEACHING THE COURSE: In addition to the basic text, a variety of instructional tools will be used to meet the needs of all students.

Basic Text: Bass, Laurie, et al. Geometry. New Jersey: Pearson Prentice Hall, 2004.

Supplementary materials:

Bass, Laurie, et al. Spanish Practice Workbook. New Jersey: Pearson Prentice Hall, 2004

Bass, Laurie, et al. Spanish Reading and Math Literacy Masters. New Jersey: Pearson Prentice Hall, 2004

Bass, Laurie, et al. Spanish Assessment Resources. New Jersey: Pearson Prentice Hall, 2004

Related Career Resources

There are many web sites that will help with career selection such as Eguidance.com, BRIDGES.com, and icouldbe.org. The software package COIN JR also has career information. Video tapes such as the Futures with Jamie Escalante - School to Career shows how math is used in various careers (FASE productions 800-404-FASE). Other videos are Career Futures. Call the Career/Tech Ed Office (562-989-7872 x 291) for more information on careers.

EVALUATION: Student achievement in this course will be measured using multiple assessment tools including but not limited to chapter tests, cumulative tests (end-of-course exam), quizzes, homework, classwork, notebooks, portfolios, projects, and open ended questions.

Textbook	Diagnosis	Monitor	Evaluate
District Developed Assessments	Practice Exam 1 and 2	Standards Based Assessments Open-Ended Math	Quarter Exams 1 st Semester Final End-of-Course
Prentice Hall	Check Skills You'll Need Lesson Quiz	Standardized Test Prep Mixed Review Lesson Quiz Mid-Chapter Quizzes Chapter Review	Chapter Test Cumulative Review Cumulative Chapter Test

Scoring Guide for Written Response/Open-Ended Mathematics

Score	Description
4	The student response thoroughly accomplishes the task. <ul style="list-style-type: none"> Shows thorough understanding and use of the central mathematical ideas(s) Includes appropriate and accurate mathematical computations Presents mathematical knowledge and ideas clearly and skillfully, using combinations of mathematical symbols and/or visual means as supporting evidence
3	The student response substantially accomplishes the task. <ul style="list-style-type: none"> Shows an essential grasp of the central mathematical idea(s) Includes appropriate and generally correct mathematical computations Presents mathematical knowledge and ideas clearly with supporting evidence
2	The student response partially accomplishes the task. <ul style="list-style-type: none"> Shows a limited grasp of the central mathematical ideas(s) May include incomplete and/or misdirected mathematical computations Presents mathematical knowledge and ideas in an unclear manner or without supporting evidence
1	The student response makes little or no progress toward accomplishing the task. <ul style="list-style-type: none"> Shows little or no grasp of the central mathematical idea(s) Includes mathematical computations that are incorrect or inappropriate Presents mathematical knowledge and ideas in a barely (if at all) comprehensible manner

Portfolio Components

Component	Description	Purpose
Cornell Notes	This is a student-created study guide of organized notes which can be used to study for the End-of-Course. Math vocabulary for new concepts and processes is correctly defined, illustrated, and written in students' own words.	Students must learn to develop communication skills which include creating and using notes for reference during the year. The notes should also be used to study for comprehensive exams.

Grade Student Work	Select examples of individual student work such as tests, quizzes and projects. Calculate the mean of the samples and convert to a four point or percent scoring system.	Student work examples demonstrate growth toward understanding of mathematics standards.
Standards Based Assessment	The Standards Based Assessments are located in the Assessment Portfolio Student Workbook. These tests should be completed before the End-of-Course Exam.	Students take common summative tests to assess proficiency level on individual Math Standards. These tests are indicators of students' depth of understanding in each standard
Written Response/ Open-Ended Math	There are three written response per standard which students should complete. The best score on the written response for each standard is recorded in the portfolio. The written response questions should be completed individually by the student.	Students who are able to write about their thinking and understanding of math concepts have a deeper understanding of math that will enable them to do well on tests like the Golden State and Advanced Placement Exams.
End- of-Course Exam	A comprehensive exam will be given at the end of the year. The test is not timed and calculators are allowed.	Students must learn the rigors of taking comprehensive exams in preparation for the California High School Exit Exam and other college entrance exams.

Geometry 1-2 Portfolio Performance Standards

The assessment portfolio is a communication tool for students to take ownership for their own learning. It allows parents and teacher to follow the development of students' progress towards reaching the standards. It provides students with multiple opportunities to show growth. It is important that all work for the portfolio is completed independently by the student. Students record their own information in the portfolio including the averaging of performance levels and graphing progress towards meeting standards. Students should create a bar graph indicating the level of achievement of each assessment or assignment.

Units	Not Proficient 1	Partial Proficient 2	Proficient 3	Advanced Proficient 4
Cornell Notes				
Fundamental Terms, Angles, Properties of Real Numbers				
• Graded Student Work				
• Standards Based Assessment				
Triangles, Congruence, Similarity				
• Graded Student Work				
• Standards Based Assessment				
Coordinate Geometry, Logic, Transformations				
• Graded Student Work				
• Standards Based Assessment				
Geometric Figures, Area, Perimeter, Solids				
• Grade Student Work				
• Standards Based Assessment				
Circles, Right Triangle Trigonometry				
• Graded Student Work				
• Standards Based Assessment				
End-of-Course Exam				

GRADING POLICY: A common grading policy ensures consistency between schools and classrooms across the district.

Suggested Percent of Grade

Classwork/Homework (10%)	15% - 20%
Notes/Projects	5%
Chapter Tests	35% - 40%
Quizzes	25% - 30%
Cumulative Tests/End-of-Course	10% - 15%

Standard Grading Scale

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	Below 60%

Submitted by: Dixie Dawson
 School: Math Office
 Revised: 8/04
 Board Approval Date: 1/5/99