SECONDARY LEARNING CENTERS

Middle and High School
Elective Course Descriptions

Developing Reading Skills in the Content Areas
Developing English Language Skills in the Content Areas
Developing Mathematics Skills in the Content Areas

Revised April 2013
Developing Reading/Language Arts Skills in the Content Areas – Middle School
(Semester Elective Course – Grades 6, 7, or 8)
Co-requisite: English 6, 7, or 8

350201 DEV READ MS A
350202 DEV READ MS B
Each semester course may be repeated for credit once in middle school.

Course Description
The major emphasis of this course is to promote a balanced reading/language arts program that provides students with opportunities to develop skills to comprehend texts and tasks in both English/Language Arts courses and other content-area courses and to make meaningful connections between the text and the students’ experiences. The course will provide sequential and structured opportunities for students with disabilities (either students in the resource specialist program or the special day program) who are reading at least at the fourth grade level as measured by multiple assessments. Students will learn systematic strategies in reading, writing, and organization that will enable them to listen, speak, think, read, and write about content material for any core course. The framework provides an opportunity to use skills for exploring ideas, attitudes, and values as they relate to self and the larger community. Ideally, this course will be taught in the school’s Learning Center.

This elective course is designed to assist students with disabilities in acquiring the prerequisite skills needed to achieve the grade level standards outlined in the Reading/Language Arts Framework for California Public Schools. All four domains of the Common Core State Standards are addressed in this course: Reading, Writing, Speaking and Listening, and Language. This intervention course earns elective credit only and cannot be used in place of the grade-level English course.

Recommended Focus Common Core State Standards (Anchor Standards)

Reading
CCRA.R.1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
CCRA.R.4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
CCRA.R.10: Read and comprehend complex literary and informational texts independently and proficiently.

Writing
CCRA.W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
CCRA.W.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCRA.W.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

Speaking and Listening
CCRA.SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.
CCRA.SL.4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Language
CCRA.L.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCRA.L.3: Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
Representative Performance Outcomes and Skills
In this course, students will know and be able to:

- Compare and contrast, gather, identify, question, and evaluate different ideas, values, and behaviors in relation to events
- Contribute pertinent information to class or group discussions and participate in other appropriate oral language situations
- Give examples of literal and implied meaning of words and trace their derivations
- Paraphrase and summarize to increase understanding
- Classify and arrange oral and written information in sequence, using a variety of prewriting strategies and utilizing a variety of sentence types that are appropriate for the purpose
- Follow directions and a sequence of events or ideas presented in oral or written form
- Use paragraphs to organize information and ideas
- Revise work by combining sentences, adding details to support the content, and incorporating an interesting opening and a satisfying conclusion
- Distinguish between major and minor facts and details, opinion, and inference in content area materials
- Summarize information from content area materials in a coherent manner, with generalizations supported by specific details
- Trace the etymology of words and use knowledge of roots and affixes to understand their meanings
- Incorporate strong, vivid, precise, and interesting vocabulary in writing about content area topics
- Proofread, edit, and evaluate their own compositions for clarity and coherence, according to established criteria of standard written English
- Locate information in reference texts by using organizational features (e.g., prefaces and appendixes)
- Use various reference materials (e.g., dictionary, thesaurus, card catalogue, encyclopedia, online information) as aids to writing

Assessments will include:

- Results from LAUSD Secondary Periodic Assessments in English Language Arts, Science, and History/Social Science will be used to guide instruction
- Curriculum-based assessments and teacher-designed formative assessments
- Student oral and written narratives, expository compositions, essays, and research compositions

Texts/Materials

- Supplementary materials purchased by the LAUSD Division of Special Education for use in the Learning Center (for more resources, see the Division of Special Education website http://sped.lausd.net):
  - Academic Workout
  - Six-Minute Solution
  - REWARDS
  - Step Up to Writing
  - Learning A-Z and Writing A-Z
- LAUSD-approved textbooks to support English Language Development courses: Reader's Handbook, Middle School edition, Write Source, grades 6, 7, and 8, and all other materials
- LAUSD English/Language Arts Instructional Guide, Grades 6, 7, and 8
- LAUSD Science Instructional Guide, Grades 6, 7, and 8
- LAUSD History/Social Science Instructional Guide, Grades 6, 7, and 8
- All District-adopted standards-based textbooks for English Language Arts, Science, and History/Social Science (teacher and student editions)
- Supplementary texts (news and magazine articles, editorials, commentaries, longer works of nonfiction)
Developing Reading/Language Arts Skills in the Content Areas – Senior High School  
(Semester Elective Course – Grades 9-12)  
Co-requisite: Grade-level English course

350211 DEV READ SH A  
350212 DEV READ SH B  
Each semester course may be repeated for credit once in high school.

Course Description  
The major emphasis of this course is to promote a balanced English/language arts program that provides students with opportunities to develop skills to comprehend texts and tasks in both English/Language Arts courses and other content-area courses and to make meaningful connections between the text and the students’ experiences. The course will provide sequential and structured opportunities for students with disabilities (either students in the resource specialist program or the special day program) who are reading at least at the sixth grade level as measured by multiple assessments. Students will learn systematic strategies in reading, writing, and organization that will enable them to listen, speak, think, read, and write about content material for any core course. The framework provides an opportunity to use skills for exploring ideas, attitudes, and values as they relate to self and the larger community. Ideally, this course will be taught in the school’s Learning Center.

This elective course is designed to assist students with disabilities in acquiring the prerequisite skills needed to achieve the grade level standards outlined in the Reading/Language Arts Framework for California Public Schools and that will be assessed on the California High School Exit Exam (CAHSEE). All four domains of the Common Core State Standards are addressed in this course: Reading, Writing, Speaking and Listening, and Language. This intervention course earns graduation credit only (non A-G course) and cannot be used to replace the grade-level English course or for credit recovery.

Recommended Focus Common Core State Standards (Anchor Standards)  
Reading  
CCRA.R.1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
CCRA.R.4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.  
CCRA.R.10: Read and comprehend complex literary and informational texts independently and proficiently.

Writing  
CCRA.W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.  
CCRA.W.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.  
CCRA.W.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

Speaking and Listening  
CCRA.SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.  
CCRA.SL.4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Language  
CCRA.L.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.  
CCRA.L.3: Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
Representative Performance Outcomes and Skills
In this course, students will know and be able to:

- Compare and contrast, gather, identify, question, and evaluate different ideas, values, and behaviors in relation to events
- Contribute pertinent information to class or group discussions and participate in other appropriate oral language situations
- Give examples of literal and implied meaning of words and trace their derivations
- Paraphrase and summarize to increase understanding
- Classify and arrange oral and written information in sequence, using a variety of prewriting strategies and utilizing a variety of sentence types that are appropriate for the purpose
- Follow directions and a sequence of events or ideas presented in oral or written form
- Use paragraphs to organize information and ideas
- Revise work by combining sentences, adding details to support the content, and incorporating an interesting opening and a satisfying conclusion
- Distinguish between major and minor facts and details, opinion, and inference in content area materials
- Summarize information from content area materials in a coherent manner, with generalizations supported by specific details
- Trace the etymology of words and use knowledge of roots and affixes to understand their meanings
- Incorporate strong, vivid, precise, and interesting vocabulary in writing about content area topics
- Proofread, edit, and evaluate their own compositions for clarity and coherence, according to established criteria of standard written English
- Use various reference materials (e.g., dictionary, thesaurus, card catalogue, encyclopedia, online information) as aids to writing

Assessments will include:

- Results from LAUSD Secondary Periodic Assessments in English Language Arts, Science, and History/Social Science will be used to guide instruction
- Curriculum-based assessments and teacher-designed formative assessments
- Student oral and written narratives, expository compositions, essays, and research compositions

Texts/Materials

- Supplementary materials purchased by the LAUSD Division of Special Education for use in the Learning Center (for more resources, see the Division of Special Education website http://sped.lausd.net):
  - Academic Workout
  - Six-Minute Solution
  - REWARDS
  - Step Up to Writing
- LAUSD-approved textbooks to support English Language Development courses: Reader’s Handbook, High School edition, Write Source, grades 9-12, and all other materials
- LAUSD CAHSEE Writing Instructional Guide
- LAUSD English/Language Arts Instructional Guide: Grades 9 and 10
- LAUSD Contemporary Composition Course: Grade 11 (teacher and student editions)
- LAUSD Expository Reading and Writing Course (ERWC), First Semester and Second Semester: Grade 12 (teacher and student editions)
- LAUSD Science Instructional Guide: ICS, Biology, and Chemistry
- LAUSD History/Social Science Instructional Guide: Modern World History and U.S. History
- All District-adopted standards-based textbooks for English Language Arts, Science, and History/Social Science (teacher and student editions)
- Supplementary texts (news and magazine articles, editorials, commentaries, longer works of nonfiction)
Developing English Language Skills in the Content Areas – Middle School
(Semester Elective Course – Grades 6, 7, or 8)
Co-requisite: Grade-level sheltered English course

170601   DEV ELS MS A
170602   DEV ELS MS B
Each semester course may be repeated for credit once in middle school.

Course Description
The major emphasis of this course is to promote a balanced English Language Development (ELD) program that provides students who are English Learners with opportunities to develop skills in English reading, writing, listening, speaking, and language to comprehend texts and tasks in both English/Language Arts courses and other content-area courses. In alignment with the California English Language Development standards, instruction in this course will focus on building students’ proficiency with collaborative language (engagement in dialogue with others), interpretive language (comprehension and analysis of written and spoken texts), and productive language (creation of oral presentations and written texts), and in developing their metalinguistic awareness (their awareness and self-monitoring of language) and accuracy of English language production. Ideally, this course will be taught in the school’s Learning Center.

The course will provide sequential and structured opportunities for students who are English Learners who are reading at least at the fourth grade level as measured by multiple assessments. Students will learn systematic strategies in English reading, writing, and organization that will enable them to listen, speak, think, read, and write about content material for any core course. The framework provides an opportunity to use English language skills for exploring ideas, attitudes, and values as they relate to self and the larger community. The teacher of this course must possess a CLAD/BCLAD/LDS or other District-approved certification for teaching English Language Development, as well as have received training in the LAUSD Advanced ELD curriculum and instructional strategies.

This course fulfills the daily English Language Development instruction requirement for English Learner students who are considered “reasonably fluent” according to the LAUSD Master Plan for English Learners but are not making annual progress toward reclassification. This elective course is designed to assist students with disabilities in acquiring the skills needed to achieve the English Language Development standards outlined in the English-Language Development Standards for California Public Schools: Kindergarten Through Grade Twelve. All four domains of the Common Core State Standards are addressed in this course: Reading, Writing, Speaking and Listening, and Language. This intervention course earns elective credit only and cannot be used in place of the grade-level English course.

Recommended Focus Areas from the CA English Language Development Standards
Part 1: Interacting in Meaningful Ways

Collaborative Uses of Language
1. Exchanging information/ideas via oral communication and conversations
2. Interacting via written English (print and multimedia)
3. Offering opinions and negotiating with/persuading others
4. Adapting language choices to various contexts

Interpretive Uses of Language
5. Listening actively and asking/answering questions about what was heard
6. Reading closely and explaining interpretations/ideas from reading
7. Evaluating how well writers and speakers use language to present or support ideas
8. Analyzing how writers use vocabulary and other language resources

Productive Uses of Language
9. Expressing information and ideas in oral presentations
10. Composing/writing literary and informational texts
11. Supporting opinions or justifying arguments and evaluating others’ opinions or arguments
12. Selecting and applying varied and precise vocabulary and other language resources
Part 2: Learning About How English Works

Structuring Cohesive Texts
1. Understanding text structure and organization based on purpose, text type, and discipline
2. Understanding cohesion and how language resources across a text contribute to the way a text unfolds and flows

Expanding and Enriching Ideas
3. Using verbs and verb phrases to create precision and clarity in different text types
4. Using nouns and noun phrases to expand ideas and provide more detail
5. Modifying to add details to provide more information and create precision

Connecting and Condensing Ideas
6. Connecting ideas within sentences by combining clauses
7. Condensing ideas within sentences using a variety of language resources

Representative Performance Outcomes and Skills
In this course, students will know and be able to:

- Develop English reading, writing, listening, and/or speaking skills that are necessary for reclassification
- Compare and contrast, gather, identify, question, and evaluate different ideas, values, and behaviors in relation to events
- Contribute pertinent information to class or group discussions and participate in other appropriate oral language situations
- Give examples of literal and implied meaning of words and trace their derivations
- Paraphrase and summarize to increase understanding
- Classify and arrange oral and written information in sequence, using a variety of prewriting strategies and utilizing a variety of sentence types that are appropriate for the purpose
- Follow directions and a sequence of events or ideas presented in oral or written form
- Use paragraphs to organize information and ideas
- Revise work by combining sentences, adding details to support the content, and incorporating an interesting opening and a satisfying conclusion
- Distinguish between major and minor facts and details, opinion, and inference in content area materials
- Summarize information from content area materials in a coherent manner, with generalizations supported by specific details
- Trace the etymology of words and use knowledge of roots and affixes to understand their meanings
- Incorporate strong, vivid, precise, and interesting vocabulary in writing about content area topics
- Proofread, edit, and evaluate their own compositions for clarity and coherence, according to established criteria of standard written English
- Use various reference materials (e.g., dictionary, thesaurus, card catalogue, encyclopedia, online information) as aids to writing

Assessments will include:

- Results from the annual CELDT administration and the LAUSD Secondary Periodic Assessments in English Language Arts, Science, and History/Social Science will be used to guide instruction
- Curriculum-based assessments and teacher-designed formative assessments
- Student oral and written narratives, expository compositions, essays, and research compositions

Texts/Materials

- LAUSD-approved textbooks to support English Language Development courses: Reader’s Handbook, Middle School edition, Write Source, grades 6, 7, and 8, and all other materials
- Supplementary materials purchased by the LAUSD Division of Special Education for use in the Learning Center (for more resources, see the Division of Special Education website http://sped.lausd.net):
  - Academic Workout
  - Six-Minute Solution
  - REWARDS
  - Step Up to Writing
  - Learning A-Z and Writing A-Z
Texts/Materials (continued)

- LAUSD English/Language Arts Instructional Guide, Grades 6, 7, and 8
- LAUSD Science Instructional Guide, Grades 6, 7, and 8
- LAUSD History/Social Science Instructional Guide, Grades 6, 7, and 8
- All District-adopted standards-based textbooks for English Language Arts, Science, and History/Social Science (teacher and student editions)
- Supplementary texts (news and magazine articles, editorials, commentaries, longer works of nonfiction)
Developing English Language Skills in the Content Areas – Senior High School
(Semester Elective Course – Grades 9-12)
Co-requisite: Grade-level sheltered English course

170605  DEV ELS SH A
170606  DEV ELS SH B
Each semester course may be repeated for credit once in high school.

Course Description
The major emphasis of this course is to promote a balanced English Language Development (ELD) program that
provides students who are English Learners with opportunities to develop skills in English reading, writing,
listening, speaking, and language to comprehend texts and tasks in both English/Language Arts courses and other
content-area courses. In alignment with the California English Language Development standards, instruction in this
course will focus on building students’ proficiency with collaborative language (engagement in dialogue with
others), interpretive language (comprehension and analysis of written and spoken texts), and productive language
(creation of oral presentations and written texts), and in developing their metalinguistic awareness (their awareness
and self-monitoring of language) and accuracy of English language production. Ideally, this course will be taught in
the school’s Learning Center.

The course will provide sequential and structured opportunities for students who are English Learners who are
reading at least at the sixth grade level as measured by multiple assessments. Students will learn systematic
strategies in English reading, writing, and organization that will enable them to listen, speak, think, read, and write
about content material for any core course. The framework provides an opportunity to use English language skills
for exploring ideas, attitudes, and values as they relate to self and the larger community. The teacher of this course
must possess a CLAD/BCLAD/LDS or other District-approved certification for teaching English Language
Development, as well as have received training in the LAUSD Advanced ELD curriculum and instructional
strategies.

This course fulfills the daily English Language Development instruction requirement for English Learner students
who are considered “reasonably fluent” according to the LAUSD Master Plan for English Learners but are not
making annual progress toward reclassification. This elective course is designed to assist students with disabilities in
acquiring the skills needed to achieve the English Language Development standards outlined in the English-
Language Development Standards for California Public Schools: Kindergarten Through Grade Twelve. All four
domains of the Common Core State Standards are addressed in this course: Reading, Writing, Speaking and
Listening, and Language. This intervention course earns graduation credit only (non A-G) and cannot be used to
replace the grade-level English course or for credit recovery.

Recommended Focus Areas from the CA English Language Development Standards

Part 1: Interacting in Meaningful Ways

| Collaborative Uses of Language | 1. Exchanging information/ideas via oral communication and conversations |
|                              | 2. Interacting via written English (print and multimedia) |
|                              | 3. Offering opinions and negotiating with/persuading others |
|                              | 4. Adapting language choices to various contexts |
| Interpretive Uses of Language | 5. Listening actively and asking/answering questions about what was heard |
|                              | 6. Reading closely and explaining interpretations/ideas from reading |
|                              | 7. Evaluating how well writers and speakers use language to present or support ideas |
|                              | 8. Analyzing how writers use vocabulary and other language resources |
| Productive Uses of Language   | 9. Expressing information and ideas in oral presentations |
|                              | 10. Composing/writing literary and informational texts |
|                              | 11. Supporting opinions or justifying arguments and evaluating others’ opinions or arguments |
|                              | 12. Selecting and applying varied and precise vocabulary and other language resources |
Part 2: Learning About How English Works

Structuring Cohesive Texts
1. Understanding text structure and organization based on purpose, text type, and discipline
2. Understanding cohesion and how language resources across a text contribute to the way a text unfolds and flows

Expanding and Enriching Ideas
3. Using verbs and verb phrases to create precision and clarity in different text types
4. Using nouns and noun phrases to expand ideas and provide more detail
5. Modifying to add details to provide more information and create precision

Connecting and Condensing Ideas
6. Connecting ideas within sentences by combining clauses
7. Condensing ideas within sentences using a variety of language resources

Representative Performance Outcomes and Skills
In this course, students will know and be able to:
- Develop English reading, writing, listening, and/or speaking skills that are necessary for reclassification
- Compare and contrast, gather, identify, question, and evaluate different ideas, values, and behaviors in relation to events
- Contribute pertinent information to class or group discussions and participate in other appropriate oral language situations
- Give examples of literal and implied meaning of words and trace their derivations
- Paraphrase and summarize to increase understanding
- Classify and arrange oral and written information in sequence, using a variety of prewriting strategies and utilizing a variety of sentence types that are appropriate for the purpose
- Follow directions and a sequence of events or ideas presented in oral or written form
- Use paragraphs to organize information and ideas
- Revise work by combining sentences, adding details to support the content, and incorporating an interesting opening and a satisfying conclusion
- Distinguish between major and minor facts and details, opinion, and inference in content area materials
- Summarize information from content area materials in a coherent manner, with generalizations supported by specific details
- Trace the etymology of words and use knowledge of roots and affixes to understand their meanings
- Incorporate strong, vivid, precise, and interesting vocabulary in writing about content area topics
- Proofread, edit, and evaluate their own compositions for clarity and coherence, according to established criteria of standard written English
- Locate information in reference texts by using organizational features (e.g., prefaces and appendixes)
- Use various reference materials (e.g., dictionary, thesaurus, card catalogue, encyclopedia, online information) as aids to writing

Assessments will include:
- Results from the annual CELDT administration and the LAUSD Secondary Periodic Assessments in English Language Arts, Science, and History/Social Science will be used to guide instruction
- Curriculum-based assessments and teacher-designed formative assessments
- Student oral and written narratives, expository compositions, essays, and research compositions

Texts/Materials
- LAUSD-approved textbooks to support English Language Development courses: Reader’s Handbook, High School edition, Write Source, grades 9-12, and all other materials
- Supplementary materials purchased by the LAUSD Division of Special Education for use in the Learning Center (for more resources, see the Division of Special Education website http://sped.lausd.net):
  - Academic Workout
  - Six-Minute Solution
  - REWARDS
  - Step Up to Writing
Texts/Materials (continued)

- LAUSD CAHSEE Writing Instructional Guide
- LAUSD English/Language Arts Instructional Guide: Grades 9 and 10
- LAUSD Contemporary Composition Course: Grade 11 (teacher and student editions)
- LAUSD Expository Reading and Writing Course (ERWC), First Semester and Second Semester: Grade 12 (teacher and student editions)
- LAUSD Science Instructional Guide: ICS, Biology, and Chemistry
- LAUSD History/Social Science Instructional Guide: Modern World History and U.S. History
- All District-adopted standards-based textbooks for English Language Arts, Science, and History/Social Science (teacher and student editions)
- Supplementary texts (news and magazine articles, editorials, commentaries, longer works of nonfiction)
Developing Mathematics Skills in the Content Areas – Middle School
(Semester Elective Course – Grades 6, 7, or 8)
Co-requisite: Math 6, Math 7, or Algebra Readiness (Math 8)

310123  DEV MATH MS A
310124  DEV MATH MS B
Each semester course may be repeated for credit once in middle school.

Course Description
The major emphasis of this course is to promote a balanced mathematics program that provides students with opportunities to develop skills in mathematics computation, application, problem solving, and conceptual understanding that will prepare them for the college preparatory mathematics courses in high school. The course will provide sequential and structured opportunities for students who are performing at least at the fourth grade level in mathematics as measured by multiple assessments. Students will learn systematic strategies in computation, application, and problem solving that will enable them to solve a variety of mathematics problems in both written and numeric forms. The framework provides an opportunity for students to use skills for developing deep conceptual understanding of the Common Core Mathematics Standards and Mathematical Practices for elementary and middle grades. Ideally, this course will be taught in the school’s Learning Center.

This elective course is designed to assist students in acquiring the prerequisite skills needed to achieve the grade level standards outlined in the Mathematics Framework for California Public Schools. Seven domains of the Common Core State Standards are addressed in this course: Ratios and Proportional Relationships, The Number System, Geometry, Statistics and Probability, Expressions and Equations, and Functions. This intervention course earns elective credit only and cannot be used in place of the grade-level mathematics course.

Recommended Focus Common Core State Standards

<table>
<thead>
<tr>
<th>Standards for Mathematical Practice – All Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make sense of problems and persevere in solving them.</td>
</tr>
<tr>
<td>2. Reason abstractly and quantitatively.</td>
</tr>
<tr>
<td>3. Construct viable arguments and critique the reasoning of others.</td>
</tr>
<tr>
<td>4. Model with mathematics.</td>
</tr>
<tr>
<td>5. Use appropriate tools strategically.</td>
</tr>
<tr>
<td>6. Attend to precision.</td>
</tr>
<tr>
<td>7. Look for and make use of structure.</td>
</tr>
<tr>
<td>8. Look for and express regularity in repeated reasoning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade 6 Ratios and Proportional Relationships: Understand ratio concepts and use ratio reasoning to solve problems.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Number System:</td>
</tr>
<tr>
<td>• Apply and extend previous understandings of multiplication and division to divide fractions by fractions.</td>
</tr>
<tr>
<td>• Compute fluently with multi-digit numbers and find common factors and multiples.</td>
</tr>
<tr>
<td>• Apply and extend previous understandings of numbers to the system of rational numbers.</td>
</tr>
<tr>
<td>Expressions and Equations:</td>
</tr>
<tr>
<td>• Apply and extend previous understandings of arithmetic to algebraic expressions.</td>
</tr>
<tr>
<td>• Reason about and solve one-variable equations and inequalities.</td>
</tr>
<tr>
<td>• Represent and analyze quantitative relationships between dependent and independent variables.</td>
</tr>
<tr>
<td>Geometry: Solve real-world and mathematical problems involving area, surface area, and volume.</td>
</tr>
<tr>
<td>Statistics and Probability:</td>
</tr>
<tr>
<td>• Develop understanding of statistical variability.</td>
</tr>
<tr>
<td>• Summarize and describe distributions.</td>
</tr>
</tbody>
</table>
Grade 7  
**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.  
- Know that there are numbers that are not rational and approximate them by 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.  
- Solve real-life and mathematical problems involving volume of cylinders, cones, and spheres.  
**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.  

Grade 8  
**The Number System**: Know that there are numbers that are not rational, and approximate them by rational numbers.  
**Expressions and Equations**:  
- Work with radicals and integer exponents.  
- Understand the connection between proportional relationships, lines, and linear equations.  
- Analyze and solve linear equations and pairs of simultaneous linear equations.  
**Functions**:  
- Define, evaluate, and compare functions.  
- Use functions to model relationships between quantities.  
**Geometry**:  
- Understand congruence and similarity using physical models, transparencies, or geometry software.  
- Understand and apply the Pythagorean theorem.  
- Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.  
**Statistics and Probability**  
- Investigate patterns of association in bivariate data.  

**Representative Performance Outcomes and Skills**  
In this course, students will know and be able to:  
- Make sense of problems involving both fundamental math skills (e.g., cardinality and counting, operations and algebraic thinking, number and operations in base ten, number and operations in fractions, measurement and data, and geometry) and problems involving algebraic expressions and equations, and persevere in solving them  
- Reason abstractly and quantitatively using a combination of verbal and written description, visual displays (e.g., figures, charts, graphs, tables), and numerical expressions  
- Construct viable arguments and critique the reasoning of others when solving problems  
- Model with mathematics in a variety of written and visual forms  
- Use appropriate tools (e.g., manipulatives, rulers, protractors, calculators) strategically  
- Attend to precision when solving problems and be able to recognize when a solution is not precise  
- Look for and make use of structure when comprehending word problems, multi-step problems, and problems involving order of operations
Assessments will include:

- Results from LAUSD Secondary Periodic Assessments in mathematics will be used to guide instruction
- Curriculum-based assessments and teacher-designed formative assessments
- Group and individual oral or written presentations involving the use of visual displays (e.g., figures, charts, graphs, tables)

Texts/Materials

- Supplementary materials purchased by the LAUSD Division of Special Education for use in the Learning Center (for more resources, see the Division of Special Education website http://sped.lausd.net):
  - *Algebra Ready* and *Algebra Rescue*
  - *Standards Plus Mathematics*
  - Voyager Math (VMath Live, etc.)
  - *Step Up to Writing in Math*
- LAUSD *Mathematics Instructional Guide*, Grades 6, 7, and 8 (Algebra Readiness)
- All District-adopted standards-based textbooks for mathematics (teacher and student editions)
- A variety of manipulatives, electronic tools and devices, and mathematics tools to support student understanding
Developing Mathematics Skills in the Content Areas – Senior High School
(Semester Elective Course – Grades 9-12)
Co-requisite: None

310127       DEV MATH SH A
310128       DEV MATH SH B

Each semester course may be repeated for credit once in high school.

Course Description
The major emphasis of this course is to promote a balanced mathematics program that provides students with opportunities to develop skills in mathematics computation, application, problem solving, and conceptual understanding that will support them in the college preparatory mathematics courses in high school. The course will provide sequential and structured opportunities for students who are performing at least at the sixth grade level in mathematics as measured by multiple assessments. Students will learn systematic strategies in computation, application, and problem solving that will enable them to solve a variety of mathematics problems in both written and numeric forms. The framework provides an opportunity for students to use skills for developing deep conceptual understanding of the Common Core Mathematics Standards and Mathematical Practices for elementary and middle grades and the high school math courses. Ideally, this course will be taught in the school’s Learning Center.

This elective course is designed to assist students in acquiring the prerequisite skills needed to achieve the standards outlined in the Mathematics Framework for California Public Schools and to meet the requirements for graduation. Seven domains of the Common Core State Standards are addressed in this course: Ratios and Proportional Relationships, The Number System, Geometry, Statistics and Probability, Expressions and Equations, and Functions. This intervention course earns graduation credit only (non A-G) and cannot be used to replace the grade-level mathematics course or for credit recovery.

Recommended Focus Common Core State Standards

| Standards for Mathematical Practice – All Grades |
|-----------------|-----------------|-----------------|
| 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. |

Algebra 1 The Real Number System:
- Extend the properties of exponents to rational exponents.
- Use properties of rational and irrational numbers.

Quantities: Reason quantitatively and use units to solve problems.

Seeing Structure in Expressions:
- Interpret the structure of expressions.
- Write expressions in equivalent forms to solve problems.

Arithmetic with Polynomials and Rational Expressions: Perform arithmetic operations on polynomials.

Creating Equations: Create equations that describe numbers or relationships.

Reasoning with Equations and Inequalities:
- Understand solving equations as a process of reasoning and explain the reasoning.
- Solve equations and inequalities in one variable.
- Solve systems of equations.
- Represent and solve equations and inequalities graphically.

Interpreting Functions:
- Understand the concept of a function and use function notation.
- Interpret functions that arise in applications in terms of the context.
- Analyze functions using different representations.
Building Functions:
- Build a function that models a relationship between two quantities.
- Build new functions from existing functions.

Linear, Quadratic, and Exponential Models:
- Construct and compare linear, quadratic, and exponential models and solve problems.
- Interpret expressions for functions in terms of the situation they model.

Interpreting Categorical and Quantitative Data:
- Summarize, represent, and interpret data on a single count or measurement variable.
- Summarize, represent, and interpret data on two categorical and quantitative variables.
- Interpret linear models.

Geometry

Congruence:
- Experiment with transformations in the plane.
- Understand congruence in terms of rigid motions.
- Make geometric constructions.
- Prove geometric theorems.

Expressing Geometric Properties with Equations:
- Use coordinates to prove simple geometric theorems algebraically.
- Translate between the geometric description and the equation for a conic section.
- Use coordinates to prove simple geometric theorems algebraically.

Similarity, Right Triangles, and Trigonometry:
- Understand similarity in terms of similarity transformations.
- Prove theorems involving similarity.
- Define trigonometric ratios and solve problems involving right triangles.

Circles:
- Understand and apply theorems about circles.
- Find arc lengths and areas of sectors of circles.

Geometric Measurement and Dimension:
- Explain volume formulas and use them to solve problems.

Representative Performance Outcomes and Skills
In this course, students will know and be able to:
- Make sense of problems involving both fundamental math skills (e.g., cardinality and counting, operations and algebraic thinking, number and operations in base ten, number and operations in fractions, measurement and data, and geometry) and problems involving algebraic and geometric expressions and equations, and persevere in solving them
- Reason abstractly and quantitatively using a combination of verbal and written description, visual displays (e.g., figures, charts, graphs, tables), and numerical expressions
- Construct viable arguments and critique the reasoning of others when solving problems
- Model with mathematics in a variety of written and visual forms
- Use appropriate tools (e.g., manipulatives, rulers, protractors, calculators) strategically
- Attend to precision when solving problems and be able to recognize when a solution is not precise
- Look for and make use of structure when comprehending word problems, multi-step problems, and problems involving order of operations

Assessments will include:
- Results from LAUSD Secondary Periodic Assessments in mathematics will be used to guide instruction
- Curriculum-based assessments and teacher-designed formative assessments
- Group and individual oral or written presentations involving the use of visual displays (e.g., figures, charts, graphs, tables)
Texts/Materials

- Supplementary materials purchased by the LAUSD Division of Special Education for use in the Learning Center (for more resources, see the Division of Special Education website http://sped.lausd.net):
  - Algebra Ready and Algebra Rescue
  - Standards Plus Mathematics
  - Voyager Math (VMath Live, etc.)
  - Step Up to Writing in Math

- LAUSD Mathematics Instructional Guide, Algebra Readiness, Algebra 1, and Geometry
- All District-adopted standards-based textbooks for mathematics (teacher and student editions)
- A variety of manipulatives, electronic tools and devices, and mathematics tools to support student understanding