Program:
Adult Literacy/High School Diploma

Course of Study:
High School Diploma

Course:
1:2002 Mathematics

31-02-70

Algebra 1/A

Course Description:
This competency-based course introduces the following concepts and skills in Algebra: expressions, equations, inequalities, formulas, functions, and systems of equations. The competencies in this course align with the Algebra 1 Standards for California Public Schools. This course has been approved to satisfy the “d” (mathematics) subject area of the UC/CSU: “a-g” requirements for freshman admission.

Credits: 5

Hours: 90

Prerequisites:
1. A grade equivalency (GE) of 9.0 or higher on the TABE 9M Math Complete Battery at the time of enrollment. Students who score below 9.0 are referred to the ABE math program. (See Math 1, 2, 3 course outlines for placement.)
   
   or
   
   Completion of Math 3 (90% or higher on all assessments), and passage of the TABE 9A Math Complete Battery with a grade equivalency of 9.0 or higher.

   A minimum reading level of 9.0 as measured by the TABE D 9/10 Reading Complete Battery is recommended.

   NOTE: Concurrently enrolled high school students should meet the same requirements as adult students.

After a student has completed this course he/she may not be allowed to re-enroll.
The Development of a Competency-Based Course Outline 1

CBE Competency-Based Education 2

Acknowledgements 5

Course Outline Competency-Based Components 6-7

About Algebra 1/A 8-11
  The Adult Secondary Education Program
  Student Placement in Algebra 1/A
  Class Configuration and Instructional Approaches
  CASAS
  CAHSEE Preparation
  Course Completion and Promotion
  Awarding Credits and Grades
  Promotion
  Assistance and Support for Teachers

About the Algebra 1/A Course Contract 12-14
  Overview of the Contract
  CASAS Testing
  Calculator Exercises
  Vocabulary Packet Check
  Prerequisite Lessons
  Textbook Components- Algebra 1 Foundations
    • www.poweralgebra.com/lesson introduction and example problems
    • Lesson Check Problems
    • Practice and Problem Solving Exercises
  Practice Worksheets
  Review Lessons
  Assessments
  Midcourse Review and Midcourse Assessment
  CAHSEE Mathematics Release Test Questions

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

(31-02-70)
<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of Course Review and Algebra 1/A End of Course Assessments</td>
<td>15-18</td>
</tr>
<tr>
<td>Competency-Based Components</td>
<td>15-18</td>
</tr>
<tr>
<td>Suggested Instructional Materials and Other Resources</td>
<td>19</td>
</tr>
<tr>
<td>Teaching Strategies and Evaluation</td>
<td>20</td>
</tr>
<tr>
<td>Teacher Feedback Form</td>
<td>21-22</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

Appreciation is expressed to TONY DI ANGELIS for writing this course outline. A special thanks to the following instructors for reviewing the content of this course: ALEJANDRO ALCARAZ, LORENA ALVARADO, LANCE ANTOLIN, IFEADIKANWA ANYIAM, TERESA BATSON, SCOTT BRADY, SOUSANNA CHTCHIAN, RODRICK DAVIS, DIANA DJONOVA, AIDA HOVHANNISYAN, BRUCE HUGHEY, PAUL KROMER, GABRIEL LOPEZ, E LEEN MAY, DAVID MENDEZ, FLORIDA PADGILAO, MARIVIC PINEDA, DAN SAUCEDO, ISMAEL SERRANO, THOMAS SMITH, MIRIAM UMANA, DAVE VENTRESCA, and DIOGENES ZELAYA. Thanks to KIT BELL for her help in writing the front matter and the editing of the course outline.

TOM CALDERON
Teacher Adviser
Adult Secondary Education

APPROVED:

MICHAEL ROMERO

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

(31-02-70)
COURSE OUTLINE COMPETENCY-BASED COMPONENTS

A course outline reflects the essential intent and content of the course described. Acceptable course outlines have six components. (Education Code Section 52506). Course outlines for all apportionment classes, including those in jails, state hospitals, and convalescent hospitals contain the six required elements:

(EC 52504; 5CCR 10508 [b]; Adult Education Handbook for California [1977], Section 100)

Course Outline Components

GOALS AND PURPOSES

The educational goals or purposes of every course are clearly stated and the class periods are devoted to instruction. The course should be broad enough in scope and should have sufficient educational worth to justify the expenditure of public funds.

The goals and purpose of a course are stated in the COURSE DESCRIPTION. Course descriptions state the major emphasis and content of a course, and are written to be understandable by a prospective student.

PERFORMANCE OBJECTIVES OR COMPETENCIES

Objectives should be delineated and described in terms of measurable results for the student and include the possible ways in which the objectives contribute to the student's acquisition of skills and competencies.

Performance Objectives are sequentially listed in the COMPETENCY-BASED COMPONENTS section of the course outline. Competency Areas are units of instruction based on related competencies. Competency Statements are competency area goals that together define the framework and purpose of a course. Competencies fall on a continuum between goals and performance objectives and denote the outcome of instruction.

Competency-based instruction tells students before instruction what skills or knowledge they will demonstrate after instruction. Competency-based education provides instruction which enables each student to attain individual goals as measured against prestated standards.

Competency-based instruction provides immediate and continual repetition. In competency-based education the curriculum, instruction, and assessment share common characteristics based on clearly stated competencies. Curriculum, instruction, and assessment in competency-based education are: explicit, known, agreed upon, integrated, performance oriented, and adaptive.

INSTRUCTIONAL STRATEGIES

Instructional techniques or methods could include laboratory techniques, lecture method, small-group discussion, grouping plans, and other strategies used in the classroom.

Instructional strategies for this course are listed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructional strategies and activities for a course should be selected so that the overall teaching approach takes into account the instructional standards of a particular program, i.e., English as a Second Language, Programs for Older Adults, Programs for Adults with Disabilities.

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

(31-02-70)
COURSE OUTLINE COMPETENCY-BASED COMPONENTS (continued)

Course Outline Components

UNITS OF STUDY, WITH APPROXIMATE HOURS ALLOTED FOR EACH UNIT

The approximate time devoted to each instructional unit within the course, as well as the total hours for the course, is indicated. The time in class is consistent with the needs of the student, and the length of the class should be that it ensures the student will learn at an optimum level.

Units of study, with approximate hours allotted for each unit, are listed in the COMPETENCY AREA STATEMENTS of the course outline. The total hours of the course, including work-based learning hours (community classroom and cooperative vocational education) is listed on the cover of every CBE course outline. Each Competency Area listed within a CBE outline is assigned hours of instruction per unit.

EVALUATION PROCEDURES

The evaluation describes measurable evaluation criteria clearly within the reach of the student. The evaluation indicates anticipated improvement in performances as well as anticipated skills and competencies to be achieved.

Evaluation procedures are detailed in the TEACHING STRATEGIES AND EVALUATION section of the course outline. Instructors monitor students’ progress on a continuing basis, assessing students on attainment of objectives identified in the course outline through a variety of formal and informal tests (applied performance procedures, observations, simulations), paper and pencil exams, and standardized tests.

REPETITION POLICY THAT PREVENTS PERPETUATION OF STUDENT ENROLLMENT

After a student has completed all the objectives of the course, he or she should not be allowed to re-enroll in the course. There is, therefore, a need for a statement about the conditions for possible repetition of a course to prevent perpetuation of students in a particular program for an indefinite period of time.
ABOUT ALGEBRA 1/A

THE ADULT SECONDARY EDUCATION PROGRAM

The Adult Secondary Education (ASE) Program is part of the continuum of academic instruction that includes English as a Second Language (ESL) and Adult Basic Education (ABE) within the Division of Adult Career Education (DACE) of the Los Angeles Unified School District (LAUSD). Learners whose foundational skills in reading, writing and math are at or above 9th grade level can enroll in the ASE program. The ASE student population includes native and non-native speakers of English, adult learners, young-adult and adolescent learners, concurrently enrolled high school students, learners in recovery, learners with disabilities, and students mandated by the courts. More information about the ASE Program is available at http://ase.adultinstruction.org.

STUDENT PLACEMENT IN ALGEBRA 1/A

Initial placement in ASE Math is done at registration, usually by the Assistant Principal of Counseling Services (APACS) or an academic teacher advisor. Students requesting Algebra 1/A are placed in the course based on the following requirements:

A. A grade equivalency (GE) of 9.0 or higher on the TABE 9M Math Complete Battery at the time of enrollment. Students who score below 9.0 are referred to the ABE math program. (See Math 1, 2, 3 course outlines for placement.)

or

B. Completion of Math 3 (90% or higher on all assessments), and passage of the TABE 9A Math Complete Battery with a grade equivalency of 9.0 or higher.

A minimum reading level of 9.0 as measured by the TABE D 9/10 Reading Complete Battery is recommended.

Note: Concurrently enrolled high school students should meet the same requirements as adult students.

CLASS CONFIGURATION AND INSTRUCTIONAL APPROACHES

Algebra 1 is taught in a variety of configurations: Individualized Instruction math labs; teacher-directed Algebra 1 classrooms; and Alternative Education Work Centers (AEWC).

Optimal instruction combines individual study, pair work, and small and whole group instruction. Teachers should review diagnosed needs and provide instruction to groups of students on a scheduled basis. Students can then join a learning group that addresses their needs.
ABOUT ALGEBRA 1/A (continued)

CASAS

CASAS testing is required for all adult math students. AEWC and concurrently enrolled high school students are not required to take the CASAS test. CASAS tests should be administered according to the following plan.

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-test</th>
<th>Schedule</th>
<th>Post-test</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra 1/A</td>
<td>505M</td>
<td>Before Assignment 1</td>
<td>506M</td>
<td>After Assignment 3</td>
</tr>
<tr>
<td>Algebra 1/B</td>
<td>505M</td>
<td>Before Assignment 1</td>
<td>506M</td>
<td>After Assignment 3</td>
</tr>
</tbody>
</table>

CAHSEE PREPARATION

Algebra 1/A and 1/B prepare students for the CAHSEE Math test using the California Department of Education (CDE) CAHSEE Mathematics Release Test Questions. The practice problems correlate to competencies taught in specific sections of the course. These problems are assigned after the student has successfully completed the assessment for a specific assignment. Some of the CAHSEE problems may be stated differently or be more challenging than problems studied for a particular assignment. If a student is having trouble with a particular CAHSEE problem, the teacher should reteach the concept and provide the student with additional practice.

Completed CAHSEE problems are kept in the student’s folder so that they can be referred to when the student prepares for the CAHSEE exam. CAHSEE Mathematics Release Test Questions not found in the Algebra 1/A and 1/B contracts are taught in the ABE math courses.

Students who successfully complete Algebra 1/A and the CAHSEE Release Test Questions may take the CAHSEE Practice Test. A score of 70% or higher on the CAHSEE Practice Test usually indicates a student’s readiness to take the official CAHSEE math test. The CAHSEE Practice Test is found in the California Department of Education Mathematics Study Guide at http://www.cde.ca.gov/ta/tg/hs/resources.asp

Concurrent students and adult students who are not going to take the CAHSEE are not required to complete the CAHSEE Mathematics Release Test Questions or take the CAHSEE Practice Test.

COURSE COMPLETION AND PROMOTION

Students who complete Algebra 1/A are proficient in the following:

- Understanding and utilizing algebraic terminology and properties to simplify, solve or evaluate expressions and equations involving real numbers, exponents and square roots.
- Solving equations of varying difficulty and equations as formulas applied to ratios, proportions, rates, percents, percent change, similarity, perimeter, area and volume.
- Writing, solving and graphing one-variable inequalities as applied in single, composite and absolute value problems. Determining the union and intersection of sets.

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

- 10 -

(31-02-70)
ABOUT ALGEBRA 1/A (continued)

- Identifying, writing and graphing linear and nonlinear functions by determining the domain and range in equations, and determining patterns in graphs and arithmetic sequences.

- Utilizing points, slope, intercept and trends to identify, write and graph linear equations of direct variation and of parallel and perpendicular lines.

- Analyzing, solving and graphing systems of linear equations and inequalities by utilizing graphing, substituting and adding or subtracting methods.

Passage of the Algebra 1/A assignments and assessments with a score of 80% or higher is required for course completion. Once students have achieved 80% or higher on the assessments, they take the end of course assessment at the end of the contract.

Awarding Credits and Grades

Scores on all components of the Algebra 1/A contract factor into a student’s grade. The following table is used to calculate a student’s final score. Teachers insert the component average in (A), multiply that average by the prescribed percentage (B) and figure a grade percentage for that component (C). The percentages for all components are added together, resulting in a final grade (D).

<table>
<thead>
<tr>
<th>Contract Component</th>
<th>(A) Component Average</th>
<th>(B) X Weighted Percentage</th>
<th>(C) % Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons</td>
<td></td>
<td></td>
<td>35%</td>
</tr>
<tr>
<td>Assessments</td>
<td></td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Vocabulary Packets</td>
<td></td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>Mid Course/End of Course Assessments</td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Total %</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students receive a grade and five credits for successfully completing Algebra 1/A. The following table is used to determine a student’s final grade. A score lower than 80% is not considered passing; therefore, a grade and credits should not be awarded.

<table>
<thead>
<tr>
<th>Course</th>
<th>Score Percentage Range (D)</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra 1/A (31-02-70)</td>
<td>93-100%</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>88-92%</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>80-87%</td>
<td>C</td>
</tr>
</tbody>
</table>

Promotion

Upon successful completion of Algebra 1/A, students are promoted to Algebra 1/B.

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

(31-02-70)
ASSISTANCE AND SUPPORT FOR TEACHERS

The Central Office ASE advisors support classroom teachers through phone consultations, email, training workshops, update meetings and classroom observations. In addition, the ASE website (http://ase.adultinstruction.org) provides a link to downloadable course outlines and other tools.

ASE PROGRAM OFFICE

Kit Bell, Supervisor
kit.bell@lausd.net
Phone: 213-241-3709

Tom Calderon, Advisor
tom.calderon@lausd.net
Phone: 213-241-3716

Tony Di Angelis, Advisor
anthony.diangelis@lausd.net
Phone: 213-241-3806
ABOUT the ALGEBRA 1/A COURSE CONTRACT

Overview of the Contract
Before embarking on the contract, students should be introduced to all the elements. Using the algebra contract, students complete a prescribed series of assignments covering specific algebra competencies and demonstrate mastery of those competencies by passing assessments. A score of 80% or higher is required on all assignments and assessments.

The Algebra 1/A contract consists of the following elements:

- CASAS Testing
- Calculator exercises
- Vocabulary packet check
- Prerequisite lessons
- Textbook components – Algebra 1 Foundations
  - www.poweralgebra.com /lesson introduction and example problems
  - Lesson Check problems
  - Practice and Problem Solving exercises
- Practice worksheets
- Review lessons
- Assessments
- Practice CAHSEE mathematics released test questions
- Midcourse review and midcourse assessment
- Cumulative review and Algebra 1/A final assessment
- CAHSEE Practice Test (in the California Department of Education “Mathematics Study Guide”)

CASAS Testing
Before beginning the contract, all adult students should take the CASAS 505M test. Upon receipt of CASAS results from the WIA coordinator, the teacher will review and remediate students on competencies needing improvement. After assignment 3, students take the CASAS 506M. Contact the site’s WIA advisor to obtain CASAS tests.

Calculator Exercises
Students are assigned calculator exercises at the beginning of the contract to ensure that they have the necessary skills to perform algebraic operations. The required calculator is the Casio fx-250. Students entering Algebra 1/A from Math 3 are not required to complete the calculator exercises because they have been assigned similar calculator exercises in ABE math. Calculators and calculator exercise books are found on the Algebra 1 Instructional Materials List.

Vocabulary Packet Check
Math literacy is an important element of all levels of mathematics, especially algebra. Students are given a Vocabulary Packet Check before every assignment. Using the textbook, students complete the vocabulary exercises in the packet and review them with the teacher before each assessment. Studying the vocabulary ensures that students not only understand the competency but also the language that supports it. Vocabulary Packets are found in the “Student Companion with Practice and Problem Solving” workbook.

Prerequisite Lessons
Prerequisite math lessons, placed before selected lessons within an assignment, prepare students for the upcoming algebra lesson. Materials for prerequisite lessons are found in the ABE Math 1, 2, 3 Instructional Materials List.
ABOUT the ALGEBRA 1/A COURSE CONTRACT (continued)

Textbook Components – Algebra 1 Foundations

- www.poweralgebra.com /lesson introduction and example problems

Each lesson in the textbook is introduced through the website www.poweralgebra.com. This website, provided by the publisher, teaches students how to solve the lesson’s problems through examples and Got It? practice problems. Poweralgebra.com should be studied before each lesson. Directions on how to use the site are provided through the “Poweralgebra.com Directions” sheet.

The examples and Got It? practice problems introduced through www.poweralgebra.com are also in the textbook. Students who do not have Internet access, can study the same explanations and practice problems using their textbook.

- Lesson Check Problems
  Students are assigned Lesson Check problems in the textbook to determine their understanding of the competencies. An answer packet provides students with a way to check their own work. The instructor signs off on the work after reviewing the completed problems.

- Practice and Problem Solving Exercises
  Once students have successfully completed the Lesson Check problems, they are assigned the Practice and Problem Solving exercises in the textbook. This work is turned into the instructor and may be checked either by a teacher assistant or the instructor.

Practice Worksheets
Students who want to take work home have the choice of using the practice worksheets instead of the Practice and Problem Solving exercises in the textbook. The practice worksheets can also be used for reteaching and extra practice. Practice worksheets are found in the “Student Companion with Practice and Problem Solving” workbook.

Review Lessons
Review lessons serve as the final comprehension check before the student completes the assessment. They are found in the textbook.

Assessments
Each assignment contains two assessments: one placed midway through the assignment and one at the end. Each assessment has a Form A and Form B. This provides the teacher with the option of using a different version of the assessment if reteaching is necessary. Assessments are corrected by the instructor.

Midcourse Review and Midcourse Assessment
After finishing the first three chapters’ assignments and assessments with a score of 80% or higher, students will complete the cumulative review. Problems for this review are listed on the Midcourse Assessment Review Lesson. This review can be corrected by the teacher assistant or the instructor. After determining that the student is fully prepared, the student takes the Algebra 1/A Midcourse Assessment.

CAHSEE Mathematics Released Test Questions
CAHSEE Mathematics Release Test Questions are assigned after the student has successfully completed the assessment for a specific assignment. The released test questions can be found at http://www.cde.ca.gov/tg/hs/resources.asp

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

– 15 –

(31-02-70)
ABOUT the ALGEBRA 1/A COURSE CONTRACT (continued)

Concurrent students and adult students who are not going to take the CAHSEE are not required to complete the CAHSEE Mathematics Release Test Questions.

End of Course Review and Algebra 1/A End of Course Assessments
After finishing all the last three chapter assignments and assessments with a score of 80% or higher, students will complete the End of Course Review. Problems for this review are listed on the End of Course Assessment Review Lesson. This review can be corrected by the teacher assistant or the instructor. After determining that the student is fully prepared, the student takes the Algebra 1/A End of Course Assessments.

CAHSEE Practice Test
Students who successfully complete the Algebra 1/A and the CAHSEE Release Test Questions may take the CAHSEE Practice Test. A score of 70% or higher on the CAHSEE Practice Test usually indicates a student’s readiness to take the official CAHSEE math test. The CAHSEE Practice Test is found in the California Department of Education Mathematics Study Guide at http://www.cde.ca.gov/ta/tg/hs/resources.asp
# COMPETENCY-BASED COMPONENTS for the ALGEBRA 1/A COURSE

<table>
<thead>
<tr>
<th>COMPETENCY AREAS AND STATEMENTS</th>
<th>MINIMAL COMPETENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. INTRODUCTION</strong></td>
<td>1. Demonstrate an understanding of classroom policies and procedures.</td>
</tr>
<tr>
<td></td>
<td>2. Review competency areas and minimal competencies for the course.</td>
</tr>
<tr>
<td></td>
<td>3. Review assignment grading and scoring policy.</td>
</tr>
<tr>
<td></td>
<td>4. Review importance of the following personal skills in the classroom/lab environment:</td>
</tr>
<tr>
<td></td>
<td>a. positive attitude</td>
</tr>
<tr>
<td></td>
<td>b. self-confidence</td>
</tr>
<tr>
<td></td>
<td>c. honesty/perseverance</td>
</tr>
<tr>
<td></td>
<td>d. self-management/work-ethic</td>
</tr>
<tr>
<td></td>
<td>e. pride in product/work</td>
</tr>
<tr>
<td></td>
<td>f. dependability</td>
</tr>
<tr>
<td></td>
<td>5. Prioritize tasks and meet deadlines.</td>
</tr>
<tr>
<td></td>
<td>6. Describe the importance of initiative and leadership.</td>
</tr>
<tr>
<td><strong>1 hour</strong></td>
<td></td>
</tr>
<tr>
<td><strong>B. TECHNOLOGY</strong></td>
<td>1. Use the Casio fx260 solar calculator to:</td>
</tr>
<tr>
<td></td>
<td>a. compute whole number addition and subtraction, multiplication and division problems.</td>
</tr>
<tr>
<td></td>
<td>b. evaluate expressions of varying difficulty by utilizing the order of operations.</td>
</tr>
<tr>
<td></td>
<td>c. compute decimal addition and subtraction, multiplication and division problems.</td>
</tr>
<tr>
<td></td>
<td>d. compute fraction/mixed number addition and subtraction, multiplication and division problems.</td>
</tr>
<tr>
<td></td>
<td>e. compute problems involving exponents and square roots.</td>
</tr>
<tr>
<td></td>
<td>f. compute problems involving adding and subtracting, multiplying and dividing integers.</td>
</tr>
<tr>
<td><strong>2 hours</strong></td>
<td></td>
</tr>
</tbody>
</table>
### C. BASIC MATH REVIEW

Review basic math concepts that support algebraic competencies.

1. Solve problems involving exponents and square roots.
2. Solve problems involving adding, subtracting, multiplying and dividing integers.
3. Solve one variable equations of varying difficulty.
4. Simplify and convert measurements using ratios and proportions.
5. Solve problems involving perimeter, area, volume, and circumference.
6. Change percents to decimals.
7. Change fractions to decimals.
8. Change decimals to percents.
9. Graph ordered pairs.
10. Translate words to numerical and algebraic symbols.
11. Predict numerical patterning.

(3 hours)

### D. FOUNDATIONS FOR ALGEBRA

Review basic math concepts that support algebraic competencies.

1. Identify and write algebraic expressions from word phrases.
2. Simplify expressions involving exponents.
3. Utilize the order of operations to evaluate expressions.
4. Classify, graph, and compare real numbers.
5. Identify and estimate square roots.
6. Identify and use properties of real numbers.
7. Find the sums and differences of real numbers.
8. Find the products and quotients of real numbers.
9. Utilize the Distributive Property to simplify expressions.
10. Solve equations using tables and mental math.
11. Utilize tables, equations and graphs to describe relationships.

(12 hours)

### E. SOLVING EQUATIONS

Solve equations of varying difficulty and equations as formulas applied to ratios, proportions, rates, percents, percent change, similarity, perimeter, area and volume.

1. Solve one-step equations with one variable.
2. Solve two-step equations with one variable.
3. Solve multi-step equations with one variable.
4. Solve equations with variables on both sides.
5. Identify equations that are identities or have no solution.
6. Rewrite and utilize literal equations and formulas.
7. Compute perimeter, area and volume of composite figures.
8. Determine ratios and rates.
9. Convert units and rates.
10. Solve and apply proportions.
11. Utilize proportions to determine missing lengths in similar figures.
12. Utilize similar figures to measure indirectly.
13. Solve percent problems using proportions.
14. Solve percent problems using the percent equation.
15. Determine the percent change.
16. Determine the relative error in linear and non-linear measurements.

(14 hours)
| F. SOLVING INEQUALITIES | 1. Write, identify and graph solutions of inequalities.  
2. Solve inequalities using addition or subtraction.  
3. Solve inequalities using multiplication or division.  
4. Solve multi-step inequalities with variables on one or both sides.  
5. Write sets, identify subsets, and determine the complement of a set.  
6. Solve and graph compound inequalities containing the word “and.”  
7. Solve and graph compound inequalities containing the word “or.”  
8. Solve equations and inequalities involving absolute value.  
9. Determine the union and intersections of sets. |
| (14 hours) |

| G. INTRODUCTION TO FUNCTIONS | 1. Utilize graphs to represent mathematical relationships.  
2. Identify and represent patterns describing linear functions.  
3. Identify and represent patterns describing nonlinear functions.  
4. Graph equations representing a function.  
5. Write equations representing a function.  
6. Determine whether a relation is a function.  
7. Identify the domain and range of a function and utilize function notation.  
8. Identify and extend patterns in sequences.  
9. Represent arithmetic sequences using function notation. |
| (14 hours) |

| H. LINEAR FUNCTIONS | 1. Determine the rate of change from tables and determine slope.  
2. Write and graph an equation of direct variation.  
3. Write linear equations using slope-intercept form.  
4. Graph linear equations in slope-intercept form.  
5. Write and graph linear equations using point-slope form.  
6. Graph linear equations using intercepts.  
7. Write linear equations in standard form.  
8. Determine whether lines are parallel, perpendicular or neither.  
9. Write equations of parallel and perpendicular lines.  
10. Write equations of trend lines and of lines of best fit.  
11. Utilize trend lines and lines of best fit to make predictions. |
| (14 hours) |
| I. SYSTEMS OF EQUATIONS AND INEQUALITIES | 1. Solve systems of equations by graphing.  
|                                           | 2. Analyze systems of equations with infinite solutions or no solution.  
|                                           | 3. Solve systems of equations using substitution.  
|                                           | 4. Solve systems of equations by adding or subtracting to eliminate a variable.  
|                                           | 6. Graph linear inequalities in two variables.  
|                                           | 7. Utilize linear inequalities when modeling real-world situations.  
|                                           | 8. Solve systems of linear inequalities by graphing.  
|   (9.5 hours)                             |  
|   (.5 hours)                              |
SUGGESTED INSTRUCTIONAL MATERIALS and OTHER RESOURCES

For a complete list of textbooks and supplemental instructional material and vendor/publisher information, please refer to the latest Adult Secondary Education Catalog and the Adult Secondary Education Vendor/Publisher and Instructional Materials List. Both are available from the Adult Curriculum Office at (213) 241-3716.

TEXTBOOKS


TECHNOLOGY

Algebra 1 Foundations Digital Answers and Solution Key. CD-ROM. 2011.

RESOURCE PERSONS

Adult Secondary Education Teacher Advisers
TEACHING STRATEGIES and EVALUATION

METHODS AND PROCEDURES

A. Individualized instruction
B. Small-group instruction
C. Whole-group discussion

EVALUATION

Course completion and promotion
Passage of the Algebra 1/A assignments and assessments with a score of 80% or higher is required for course completion. Once students have achieved 80% or higher on the assessments, they take the end of course assessment at the end of the contract.

Awarding credits and grades
Scores on all components of the Algebra 1/A contract factor into a student’s grade. The following table is used to calculate a student’s final score. Teachers insert the component average in (A), multiply that average by the prescribed percentage (B) and figure a grade percentage for that component (C). The percentages for all components are added together, resulting in a final grade (D).

<table>
<thead>
<tr>
<th>Contract Component</th>
<th>(A) Component Average</th>
<th>(B) X Weighted Percentage</th>
<th>(C) % Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary Packets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Course/End of Course Assessments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total %</td>
<td></td>
<td></td>
<td>(D)</td>
</tr>
</tbody>
</table>

Students receive a grade and five credits for successfully completing Algebra 1/A. The following table is used to determine a student’s final grade. A score lower than 80% is not considered passing; therefore, a grade and credits should not be awarded.

<table>
<thead>
<tr>
<th>Course</th>
<th>Score Percentage Range (D)</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra 1/B</td>
<td>93-100%</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>88-92%</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>80-87%</td>
<td>C</td>
</tr>
</tbody>
</table>

Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education

(31-02-70)
**TEACHER FEEDBACK FORM**

The Division of Adult and Career Education would appreciate your feedback on this course outline. Please use a copy of this form to submit any comments or corrections. Include a copy of the course outline page if necessary. You may choose to respond to any and/or all of these questions. All personal information is optional.

**Personal Information (Optional)**

Name ___________________________ Date ___________________________

School ___________________________ Contact Number ___________________________

**Feedback**

Course Number and/or Title of Course

________________________________________________________________________

Directions: Please respond to these statements. If you choose a “No” or “Sometimes” response, please comment.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
<th>Sometimes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This outline is easy to use.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. This outline contains appropriate content for the course.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. This outline reflects the needs of my students.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. This outline reflects the current educational standards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I use this outline to plan my lessons.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I use the materials/textbook suggested for use with this course.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The materials/textbooks suggested for use with this course correlate with the competencies.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments for above statements:

Directions: Please answer these questions.

1. If you were revising this course outline, what would you do differently? Why?

2. What is the most helpful section or feature of this course outline? Why?
3. What section or feature of this course outline do you use the least? Why?

4. What do you like the most about this course outline? Why?

Directions: Please list any errors you have found in this outline and the needed corrections. Be sure to list the page numbers involved.

<table>
<thead>
<tr>
<th>Error</th>
<th>Correction</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Comments:

Thank you for your feedback.

Please fax this form to Office of Curriculum Development, Tom Calderon, Adviser (213) 241-8998 or send via school mail to DACE/Office of Curriculum Development, Beaudry Bulding, 18th Floor, Room 185.

*Algebra 1/A (31-02-70) December/2012, LAUSD Division of Adult and Career Education*
Statement for Civil Rights

All educational and vocational opportunities are offered without regard to race, color, national origin, gender, or physical disability.