

**SWEETWATER UNION HIGH SCHOOL DISTRICT**  
**DIVISION OF ADULT EDUCATION**  
 High School Subjects

<u>VI</u>	<u>High School Equivalency Test Preparation</u>	<u>9083</u>
	<u>Mathematics</u>	<u>Code</u>
Level	2015	

**DURATION:** Approximately 60 hours

**GRADE LEVEL:** Ungraded Adult

**PREREQUISITES:** A recommended minimum seventh grade reading level or a minimum score of 560 on the TABE

**CREDIT:** None

**PROGRAM DESCRIPTION:**

This course reflects and reviews the secondary school curriculum standards in the mathematics content areas: number operations and number sense; measurement and data analysis, statistics, and probability; algebra, functions, and patterns; and geometry. Students will solve a variety of word problems, many with graphics, using basic computation, analytical, reasoning skills, and DOK level 3. A special feature of the High School Equivalency Test Preparation course is its emphasis on critical thinking, study, and test-taking skills so that students are prepared to take standardized tests which require application of knowledge acquired in high school.

**STUDENT LEARNER OUTCOMES:**

- Students will establish personal, academic and/or workforce goals and demonstrate progress toward them
- Students will solve problems
- Students will communicate clearly and collaborate with others
- Students will use resources, including technology, to research, organize and communicate information

**GOALS**

Through the principles and practice presented in this course, students will

- 1.0 Perform mathematical computations to find a solution in the content areas of: number operations and number sense; measurement and data analysis, statistics, and probability; algebra, functions, and patterns; and geometry.
- 2.0 Find the correct approach to solve a problem in the content areas of: number operations and number sense; measurement and data analysis, statistics, and probability; algebra, functions, and patterns; and geometry.
- 3.0 Improve study skills.

#### 4.0 Develop test-taking skills.

### **OBJECTIVES**

Students who successfully complete this course will be able to:

- 1.0 With respect to performing mathematical computations to find a solution,
  - 1.1 Use and apply knowledge of mathematics in both mathematical problems and real world situations reflecting practical, everyday tasks.
  - 1.2 Work problems involving whole numbers, fractions, decimals, percents, ratios, and proportions.
  - 1.3 Represent and use numbers in a variety of equivalent forms.
  - 1.4 Use proper order of operations.
  - 1.5 Perform computations both with and without a calculator.
  - 1.6 Use basic math skills in items about length, perimeter, circumference, area, volume, and time.
  - 1.7 Make conversions in both the customary U.S. measurement system and the metric system.
  - 1.8 Use information in tables, charts, and bar, line, and circle graphs.
  - 1.9 Find the mean, median, mode, or range of a set of data and the probability that a given event will occur.
  - 1.10 Solve algebraic equations.
  - 1.11 Indicate answers correctly on the coordinate grid.
  - 1.12 Find values of angles and line segments in both common and irregular figures.
  - 1.13 Apply the concepts of congruence, similarity, and the Pythagorean Relationship to mathematical problems.
- 2.0 With respect to finding the correct approach to solve a problem,
  - 2.1 Relate the basic arithmetic operations to each other.
  - 2.2 Compare numbers and draw conclusions.
  - 2.3 Decide which pieces of information needed to solve the problem, locate the information, and work the problem.
  - 2.4 Write algebraic equations.

- 2.5 Show how to solve for any variable within a formula.
- 3.0 With respect to improving study skills,
  - 3.1 Set a study schedule.
  - 3.2 Organize materials.
  - 3.3 Read regularly.
  - 3.4 Take notes.
  - 3.5 Make a list of unfamiliar words, look them up in the dictionary, and write the meanings.
- 4.0 With respect to developing test-taking skills,
  - 4.1 Read directions carefully.
  - 4.2 Analyze test questions: read each question carefully to know what is being asked; read all answer options carefully to determine best answer.
  - 4.3 Recognize the requirements of the GED or HiSet Test: age limitations, required identification, costs, retake policies, time allotment, scoring.
  - 4.4 Prepare for taking actual test by using as many pre-tests/practice tests as are available.
  - 4.5 Control test anxiety through adequate preparation, positive thinking, and relaxation techniques.
  - 4.6 Plan for the physical requirements for test-taking, including adequate sleep, appropriate eating before the test, and arriving with adequate time to complete the necessary paperwork and avoid stress.

**INSTRUCTIONAL STRATEGIES AND TIMES:**

Teacher lecture and demonstration	25%
Individual work in textbooks or computer software	30%
Class discussions	10%
Teacher supervision of student practice	15%
Timed pre-testing testing	15%
Evaluation	05%

**EVALUATION:**

1. Satisfactory completion of assignments as evaluated by the instructor.
2. Satisfactory completion of teacher-made and/or standardized test as evaluated by the instructor.
3. Satisfactory progress and participation in classroom activities as evaluated by the instructor.

**CONDITIONS FOR REPETITION:**

Students who have failed to meet the objectives because of insufficient attendance or inability to master content may repeat the course.

Approved:  
BOARD OF TRUSTEES  
August 27, 1987

Revised:  
May 20, 2002  
May 9, 2006  
November 20, 2014  
May 26, 2015  
October 26, 2015