

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

ABED 443

COURSE TITLE

BASIC EDUCATION, MATH, BEGINNING LEVEL

TYPE COURSE

NON-FEE

ABE

CATALOG COURSE DESCRIPTION

This course introduces and reviews basic math skills at the beginning level (0-3.9), including critical thinking needed to function in society. Upon completion and demonstration of competence, students may continue basic skills instruction at the intermediate level (4.0-8.9) or enroll in a vocational training class. (FT)

LECTURE HOURS

54

LABORATORY HOURS

ADVISORY

None

RECOMMENDED SKILL LEVEL

None

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

COURSE OBJECTIVES

Upon successful completion of this course, students will be able to:

1. Demonstrate pre-computation skills (e.g., identify place value, rounding, estimating).
2. Compute using whole number operations of addition, subtraction, multiplication and division.
3. Analyze simple word problems.
4. Apply computation and problem-solving skills in simple life situations.
5. Demonstrate the ability to satisfy the Program's Student Learning Objectives

SECTION II

COURSE CONTENT AND SCOPE

1. Demonstrate pre-computation skills
 - 1.1. Identify and classify numeric symbols
 - 1.2. Count and associate numbers with quantities; read and write number words
 - 1.3. Recognize correct number sequencing
 - 1.4. Identify information needed to solve a problem
 - 1.5. Demonstrate use of the calculator to solve whole number calculations
 - 1.6. Use estimation and mental arithmetic in everyday situations
 - 1.7. Recognize place value
2. Compute using whole number operations for addition, subtraction, multiplication and division
 - 2.1. Recite basic number facts of addition, subtraction, multiplication and division
 - 2.2. Add numbers with renaming (carrying)
 - 2.3. Subtract two or more digits with up to three renaming
 - 2.4. Learn multiplication facts up to ten
 - 2.5. Multiply two numbers with renaming
 - 2.6. Divide by two numbers
 - 2.7. Solve single step word problems requiring addition, subtraction, multiplication and division

COURSE CONTENT AND SCOPE (CONTINUED)

3. Analyze simple word problems by stating the operation needed to solve the problem
 - 3.1. Read the problem two times
 - 3.2. Locate the question
 - 3.3. Find key words that indicate the correct operation
 - 3.4. Circle the facts needed to answer the question
 - 3.5. Decide if the answer will be bigger or smaller than numbers in the problem
 - 3.6. Estimate answer
4. Apply computation and problem-solving skills in life situations
 - 4.1. Interpret temperatures on a thermometer
 - 4.2. Count and convert currency; make change
 - 4.3. Prepare and use a simple family budget
 - 4.4. Compare prices when shopping
 - 4.5. Balance a checkbook
 - 4.6. Interpret clock time; calculate time intervals
 - 4.7. Follow a schedule
 - 4.8. Estimate time to complete a task
 - 4.9. Compute using solid, liquid and linear measurements
 - 4.10. Interpret and evaluate data given on line, picture, bar graphs
 - 4.11. Interpret simple maps
 - 4.12. Use technology to assist with computation and problem-solving in everyday situations

APPROPRIATE READINGS

Basic Skills With Whole Numbers, Cambridge, current version
Breakthroughs in Math, Book 1, Contemporary, current version
Learn Math Quickly, DVD Series A, Janet Scarpone, current version
Manipuatives
Number Power, Book 1, Contemporary, current version
Number Sense, Contemporary, current version
Computer Assisted Instruction (Skillstutor, Diascriptive Reading), current version

WRITING ASSIGNMENTS

Integrated into math assignments.

OUTSIDE ASSIGNMENTS

At the discretion of the instructor.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Integrated into the math assignments.

EVALUATION

1. TABE 9/10 Pre and Post Tests
2. Criterion referenced tests (developed by instructor, department) with 80% accuracy

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3. Self evaluation
4. Teacher informal evaluation based upon observation, student participation in cooperative learning

METHOD OF INSTRUCTION

The Basic Skills Curriculum is a multi-modal, multi-media approach to learner centered instruction. Methods will focus on direct instruction and student centered methods including lecture, laboratory, small groups, cooperative learning and field trips.

This course, or sections of this course, may be offered through distance education.

TEXTS AND SUPPLIES

Texts:

1. *Number Power 1*, Jerry Howett, Contemporary, current version
2. *Breakthroughs in Math, Book 1*, Robert Mitchell, Contemporary, current version
3. *Basic Skills With Whole Numbers*, Jerry Howett, Cambridge, current version

Manuals: None

Software:

Skillstutor, Houghton Mifflin, current version. Web based learning software, assigned by instructor.

PREPARED BY Gary Gleckman/Nancy Hampson DATE 08/24/09

REVISED BY Instructional Services, SLOs added DATE March 3, 2017

REVISED BY Leah Gualtieri DATE May 6, 2020

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog