SAN DIEGO COMMUNITY COLLEGE DISTRICT CONTINUING EDUCATION COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

DSPS 635D

COURSE TITLE

BASIC MATH-HEARING IMPAIRED

TYPE COURSE

NON-FEE

SPECIAL EDUCATION

CATALOG COURSE DESCRIPTION

A beginning course to introduce basic principles of Mathematics to Hearing Impaired students. This course provides beginning level competency in addition, subtraction, multiplication and division and provides practice in applying these principles to life situations such as counting money and figuring time. Individualized to meet students specific needs. (FT)

LECTURE/LABORATORY HOURS

3-6 hours per week

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

NONE

INSTITUTIONAL STUDENT LEARNING OUTCOMES

- 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

- 1. To provide basic Mathematic principles and skills development in addition, subtraction, multiplication and division.
- 2. To provide the individual student with practice in basic Mathematics where the student most needs practice.
- 3. To provide practice in applying these basic concepts real life situations including counting money, telling time and counting days and weeks.

COURSE OBJECTIVES

- 1. The student will be able to add up to four digit numbers with carrying with 90% accuracy.
- 2. The student will be able to subtract numbers with up to four digits with borrowing with 90% accuracy.
- 3. The student will be able to add and subtract money I up to four digits with 90% accuracy.
- 4. The student will be able to perform various multiplication tasks with 9-% accuracy including:
 - 4.1. Examining arrays.
 - 4.2. Multiplying by 1, 2, 3...9.
 - 4.3. Finding missing factors.
- 5. The student will be able to perform various division tasks with 90% accuracy including:
 - 5.1. Finding missing factors.
 - 5.2. Dividing using arrays.
 - 5.3. Dividing by 1, 2, 3...9.
 - 5.4. Dividing and checking.
 - 5.5. Dividing with remainders.
- 6. The student will be able to add and subtract fractions including halves, fourths, eighths, thirds, sixths, fifths.
- 7. The student will be able to count money and determine change using coins to equal a value with 90% accuracy.
- 8. The student will be able to tell time at precise value with 90% accuracy.

BASIC MATH-HEARING IMPAIRED PAGE 3

SECTION II

COURSE CONTENT AND SCOPE

- 1. Addition
 - 1.1. Finding sums (adding 1, 2, 3...10)
 - 1.2. Adding two digit number with and without carrying
 - 1.3. Adding three digit numbers with and without carrying
 - 1.4. Adding four numbers with and without carrying
 - 1.5. Adding cents in two, three and four digits
 - 1.6. Adding money in two, three and four digits
- 2. Subtraction
 - 2.1. Finding the difference (subtracting 1, 2, 3...10)
 - 2.2. Subtracting horizontally
 - 2.3. Subtracting two digits with and without borrowing
 - 2.4. Subtracting three digits with and without borrowing
 - 2.5. Subtracting four digits with and without borrowing
 - 2.6. Subtracting money in two, three and four digits
- 3. Multiplication
 - 3.1. Adding the same number (multiple addends)
 - 3.2. Multiplication: examining arrays
 - 3.3. Multiplying by 1, 2, 3...9
 - 3.4. Finding mission factors
- 4. Division
 - 4.1. Finding missing factors
 - 4.2. Division using arrays
 - 4.3. Dividing by 1, 2, 3...9
 - 4.4. Dividing and checking
 - 4.5. Dividing with remainders
- 5. Fractions
 - 5.1. Identifying halves, fourths, eighths, thirds, sixths, fifths
 - 5.2. Adding halves, fourths, eighths, thirds, sixths, fifths
 - 5.3. Subtracting halves, fourths, eighths, thirds, sixths, fifths
- 6. Money and Time
 - 6.1. Counting pennies, nickels, dimes, quarters, half dollars and dollars
 - 6.2. Counting change
 - 6.3. Using coins to equal a value
 - 6.4. Telling the hour
 - 6.5. Telling the time
 - 6.6. Counting days and months
- 7. Advance Counting
 - 7.1. Counting to 99
 - 7.2. Counting beyond 99
 - 7.3. More/less relationships, 0-9,999
 - 7.4. Place values of tenths, hundredths, ones, tens, hundreds and thousands

BASIC MATH-HEARING IMPAIRED PAGE 4

<u>APPROPRIATE READINGS</u>

NONE

WRITING ASSIGNMENTS

NONE

OUTSIDE ASSIGNMENTS

NONE

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

NONE

EVALUATION

- 1. Pre- and post-test of units.
- 2. Progress though units.
- 3. Problem solving and work assignments completed.
- 4. Quizzes.

METHOD OF INSTRUCTION

- 1. Individualized instruction, one on one demonstrations.
- 2. Self-paced progress through units.
- 3. Problem solving and role play.
- 4. Development of Individual Education Plans, as required.

TEXTS AND SUPPLIES

Text:

A.S.M.D.: Multi-graded Arithmetic Practice and Drill Sheets, Valerie e. Mock, Ferson-Pitman Publishers, Inc., 1977

Instructor prepared worksheets, flashcards, etc. Assorted mock materials (money, clocks, etc)

BASIC MATH-HEARING IMPAIRED PAGE 5

PREPARED B'	Y Tom Humphries	DATE	August 29, 1984
	•		-
REVISED BY	Instructional Services, SLOs added	DATE	March 16, 2017

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