SPED C012N: MATHEMATICAL CONCEPTS

Item	Value
Top Code	493030 - Learning Skills, Handicapped
Units	0 Total Units
Hours	16-108 Total Hours (Lab Hours 16-108)
Total Outside of Class Hours	0
Course Credit Status	Noncredit (N)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	Yes; Repeat Limit 99
Grading Policy	P/NP/SP Non-Credit (D)

Course Description

Designed to assist students with intellectual disabilities in acquiring and applying the following number, money, time, and measurement concepts. Students and teacher will identify the student's personal academic goals, and Student Educational Plans will be developed for students based on their goals and ability level. Noncredit. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Demonstrate fundamental concepts of numbers including number identification, counting and sequencing.
2. Apply fundamental money and time skills through simulated life activities.
3. Demonstrate fundamental knowledge of linear measurements, weights and volume.

Course Objectives

- 1. Students will categorize objects according to shape, size, length, and pattern.
- 2. Students will identify numerals and numbers.
- 3. Students will practice basic number concepts.
- 4. Students will arrange numbers in numerical order.
- 5. Students will demonstrate the ability to count.
- 6. Students will recognize ordinal numbers.
- 7. Students will differentiate between money denominations.
- 8. Students will compare the value of bills and coins.
- 9. Students will recite or identify days of the week and the names of the months.
- 10. Students will demonstrate the concept of time associated with an activity.
- 11. Students will use time concepts such as before, after, during, morning, afternoon, night, etc.
- 12. Students will generate examples of time sequencing.
- 13. Students will tell time to the nearest hour and half-hour.
- 14. Students will apply basic measurement skills when solving simple math problems.

Lecture Content

See Lab Content

Lab Content

Number Concepts Shape, size, length and pattern discrimination Number recognition Number sorting Number matching Number identification by name or label Number writing and/or typing Counting One-to-one correspondence between objects in sets Set construction using objects Set construction with same number of objects Set construction with equal, more, less, many and few Numbers representing sets of objects Number sequence Objects in order of size from smallest to largest Objects in order of length from shortest to longest Sets of objects in order from smallest to largest in number Number location on a number line Ordinal numbers First, middle and last in a group of objects Number line counting forward and backward Missing numbers on a number line Number location before and after a given number or between two numbers on a number line Money skills Money recognition Coin and bill sorting Coin and bill matching Coin and bill identification by name or label Comparing the value of coins and bills Time Clocks and calendars as time measurement tools Traditional (analog) vs. digital clocks Identification and location of clock face numbers Hand placement in association with a routine activity Before, after, now and later Morning, afternoon and night Yesterday, today, tomorrow, last night, this morning, etc. Hour and minute hand recognition and location Measurement Small, medium and large from a group of objects Long, longer, and longest from a group of objects i >Heavier and lighter from a group of objects Capacity of various sizes of containers for liquids Capacity of containers which hold a variety of solid objects Tools for different kinds of measurement i

Method(s) of Instruction

- Regular NC Lab (NC4)
- Live Online Reg NC Lab (NCC)

Instructional Techniques

Discussion of concepts. In-class hands-on practice of strategies and techiques Evaluations Demonstration of skills Use of technology to learn and excute mathematical concepts

Reading Assignments

-

Writing Assignments

-

Out-of-class Assignments

-

Demonstration of Critical Thinking

-

Required Writing, Problem Solving, Skills Demonstration

-

Eligible Disciplines

Special education: Minimum qualifications for these faculty members are specified in title 5, section 53414. Masters degree required. Title 5, section 53414

Other Resources

1. Coastline Library