Course Outline

Course: Math

Level: 9th-12th grade (MCI)

Credits: 5

Revised: 11/08 (J. Smith) Prerequisites: None

Course Description:

The Cognitively Disabled program offers small group instruction in a self-contained format. Students placed in the Cognitively Disabled program require extensive direct instruction in multiple settings in order to acquire and apply the skills necessary to function in domestic, community, living, recreational/leisure and vocational activities in school, work, home, and community environments. Modified curricula and alternative instructional approaches focusing on basic skills, life skills, and vocational skill development are utilized.

CCCS Addressed:

- Standard 4.1 (Number and Numerical Operations) All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.
- Standard 4.2 (Geometry and Measurement) All students will develop spatial sense and the ability to use geometric properties, relationships, and measurement to model, describe, and analyze phenomena.
- Standard 4.3 (Patterns and Algebra) All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.
- Standard 4.5 (Mathematical Processes) All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

Goals and Objectives

Goal- Develop number sense and perform standard numerical operations and estimations on all types of numbers in a variety of ways.

Objectives-

- Count and perform simple computations with coins and currency.
- Compare and order whole numbers
- Develop proficiency with basic addition and subtraction facts.
- Use pencil and paper procedures for addition and subtraction of one, two and three digit numbers
- Explore a variety of strategies for estimating the quantity of something and results of computation.
- Demonstrate an understanding of whole place value concepts.
- Develop proficiency with basic multiplication facts

• Use pencil and paper methods for multiplication of two digit numbers by one digit numbers.

Goal- Develop the ability to use units of measurement and measurement tools Objectives-

- Compare and order objects by length, weight, capacity, time and temperature.
- Select and use appropriate standard units of measurement and standard measurement tools to solve real-life problems.
- Estimate measures for length, weight, capacity, time and temperature.
- Convert simple measurement units within a system.

Goal- Students will use mathematical processes of problem solving and technology to solve problems and communicate mathematical ideas.

Objectives-

- Solve problems that arise in mathematics
- Select and apply a variety of appropriate problem solving strategies (diagrams, etc.) to solve problems.
- Communicate mathematical thinking clearly and coherently.
- Use the language of mathematics to express mathematical ideas.
- Apply mathematics to practical situations
- Create and use concrete and pictorial representations to organize, record and communicate mathematical ideas.
- Use calculators as problem solving tools.

Technology: The computer will be used with a Touchscreen for those students with fine motor difficulties.

Materials-

- Money, Remedia Publications, 2000
- Menu Math, Kitty Scharf and Barbara Johnson, Remedia Publications, 2000
- <u>How to Work With Time and Money, Charles Shields, Teacher Created Materials, Inc., 2004</u>
- <u>Basic Math Practice</u>, PCI Educational Publishing, 2003

Evaluation Methods:

- Teacher made tests and quizzes
- Oral evaluations
- Evaluation of money counting skills using real money
- Performance using the cash register at monthly bake sales