COURSE SYLLABUS

MAT0100

1ST grade Math

COURSE DESCRIPTION

First grade is a year full of exploring numbers and problems in many different ways. It is important for the student to get fully involved in the learning. Math cannot be completely learned just on a computer. There has to be some hands-on activities that take learning to a higher level of thinking. Each unit of study concludes with a performance task that the student will use to demonstrate comprehension of each math standard.

PREREQUISITES

Identify numbers

MATERIALS LIST

All Modules unless otherwise noted:
- Collection of small items to count about 100
- Paper bags
- Watch or timer
- Notebook paper and white paper
- Pencils and erasers
- Markers and crayons
- Small dried beans
- Popsicle sticks
- Glue
- Dice
- Scissors
- Video recorder
- Deck of cards
- Digital camera

Module 3:
- Construction paper
- Magazines to cut out pictures
- Poster paper
- Box of toothpicks
- Mini marshmallow, grapes, or raisins to complete 3D shape project
- Module 4:
- Jar
- Spoon
- Bag of rice or beans
- Many types of small items to count
- Small Ziploc bags

Module 6:
- Newspapers to cut
- Module 3:
- Construction paper
- Magazines to cut out pictures
- Poster paper
- Box of toothpicks
- Mini marshmallow, grapes, or raisins to complete 3D shape project
- Module 4:
- Jar
- Spoon
- Bag of rice or beans
- Many types of small items to count
- Small Ziploc bags

Module 7:
- Same as Module 6

Module 8:
- Play money - bills and coins

Module 10:
- Paperclips
- Measuring tape and yard stick
- Ruler
- Weight scale
- Balance scale
- Hanger scale
- Measuring cups
**Measurable Learning Outcomes**

**Module 1**

The student will

- count from 0 to 100 and write the corresponding numerals; and group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value.

- count forward by ones, twos, fives, and tens to 100 and backward by ones from 30.

**Module 2**

The student will

- count from 0 to 100 and write the corresponding numerals; and

- group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value.

**Module 3**

The student will

- identify the parts of a set and/or region that represent fractions for halves, thirds, and fourths and write the fractions.

- identify and trace, describe, and sort plane geometric figures (triangle, square, rectangle, and circle) according to number of sides, vertices, and right angles.

- construct, model, and describe objects in the environment as geometric shapes (triangle, rectangle, square, and circle) and explain the reasonableness of each choice.

**Module 4**

- The student, given a familiar problem situation involving magnitude, will select a reasonable order of magnitude from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, 500); and

- explain the reasonableness of the choice.

- The student will sort and classify concrete objects according to one or more attributes, including color, size, shape, and thickness.
The student will recognize, describe, extend, and create a wide variety of growing and repeating patterns.

Module 5
The student will

· recall basic addition facts with sums to 18 or less and the corresponding subtraction facts.

Module 6
The student will

· demonstrate an understanding of equality through the use of the equal sign.

Module 7
The student will

· create and solve one-step story and picture problems using basic addition facts with sums of 18 or less and the corresponding subtraction facts.

Module 8
The student will

· identify the number of pennies equivalent to a nickel, a dime, and a quarter; and
· determine the value of a collection of pennies, nickels, and dimes which has a total value of 100 cents or less.

Module 9
The student will

· tell time to the half-hour, using analog and digital clocks.
· use calendar language appropriately (e.g., names of the months, today, yesterday, next week, last week).

Module 10
The student will

· use nonstandard units to measure length, weight/mass, and volume.
compare, using the concepts of more, less, and equivalent,

a) the volumes of two given containers; and

b) the weight/mass of two objects, using a balance scale.

**COURSE REQUIREMENTS AND ASSIGNMENTS**

A. Individual lesson assessments

B. Education City assessments

C. Weekly quizzes

D. Projects

**COURSE GRADING AND POLICIES**

All assessments in the first grade are given the same weight.

**SCALE:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>93 – 100</td>
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<tr>
<td>B</td>
<td>85 – 92</td>
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<tr>
<td>C</td>
<td>77 – 84</td>
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<tr>
<td>D</td>
<td>70 – 76</td>
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<tr>
<td>F</td>
<td>Below 70</td>
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**OTHER POLICIES**

Academic Misconduct: See pages 27-30 of your Student Handbook

Repeating Assignments: Students may have two attempts on lessons. Quizzes and tests cannot be repeated to gain a higher grade. Quizzes and tests may be reset for technical issues, but a new set of questions will be generated.
Scope and Sequence

Unit 1 - Number Sense Development

Unit 2 – Place Value

Unit 3 - Geometry

Unit 4 - Estimation and Patterns

Unit 5 - Addition and Subtraction

Unit 6 - Fact Families and Equal Signs

Unit 7 - Word Problems and 2-Digit Math

Unit 8 - Money

Unit 9 - Time

Unit 10 - Measurement