



Course Title: Mathematics in the Elementary School

Course Number: MAT 104

Class Hours: 3

Laboratory Hours: 0

Credit Hours: 3

Dept. Head Approval: _____
Maria DeLucia, Ph.D.

Date: 2002–2003

Dean's Approval: _____
Reginald Luke, Ph.D.

Prerequisite:

Appropriate score on the College Placement Test or successful completion of MAT–013.

Textbook of Course:

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Bassarear	<u>Mathematics for Elementary School Teachers, 2e</u>	Houghton Mifflin Co. 2001

Catalog Course Description:

An introduction to basic mathematics for para–professionals. Includes the teaching of arithmetic operations in those number systems appropriate for the elementary school, problem–solving techniques for the development of mathematical concepts, and the use of instructional aids.

Supplemental Materials:

Bassarear Student Manipulatives Kit

A hand held calculator which must have:

A memory and memory functions, y to the x, algebraic loci or RPN, square root, squaring, sign chance, and the four operations, and my have but need not have mean, standard deviation, and others.

Also:

A protractor, metric ruler, and compass.

Objectives:

The student will demonstrate the ability to:

1. Research and report information on alternatives for teaching and successful teaching strategies.
2. Make and/or use manipulatives appropriately.
3. Recognize and explain the stages through which children progress mathematically.
4. Perform basic mathematics skills learned in pre-k through eighth grade curriculum.
5. Perform and explain teaching techniques and mathematical concepts contained in pre-k through sixth grade curriculum.
6. Use the hand-held calculator as a computational tool.
7. Use an already programmed computer as a computational and time-saving tool.

Goals:

To produce a paraprofessional with sufficient mathematical knowledge to be able to guide children appropriately in their mathematical development.

IN ADDITION TO LECTURE/CLASS TIME/TESTS, THE FOLLOWING ARE ALSO REQUIRED:

1. A two hour final exam taken during the specially scheduled exam time after the last day of classes.
2. Projects, reports, games, assignments as required by an individual instructor to demonstrate measurable objectives #1, 2, 4, 6.

ADDITIONAL SUPPLEMENTAL MATERIALS ARE AVAILABLE IN CENTER II.

DAY-BY-DAY OUTLINE

DAY	Content
1	Overview, 1.1–1.3
2	1.4 – 1.5
3	1.6 – 1.7
4	2.1 – 2.3 (only base 10)
5	Review
6	Test
7	3.1 – 3.2
8	3.3 – 4.1
9	4.2 – 4.3
10	Review
11	Test
12	5.1 – 5.2
13	5.3 – 5.4
14	More 5.4
15	Review
16	Test
17	6.1 – 6.2
18	7.1 – 7.2 (just mean, median, and mode)
19	7.3
20	Review
21	Test
22	8.1 – 8.2
23	9.1 – 9.2
24	10.1 – 10.2
25	10.3
26	Review
27	Test
28	Final Review