University of South Carolina Lancaster

Division of Science and Mathematics

Math 399 Mathematics for Elementary School Teachers III
Course Outline

Instructor: Dr. Dwayne C. Brown (e-mail: dwayneb@gwm.sc.edu)

Office: 117 Hubbard Hall (Telephone: 313-7037)

Office Hours: Monday and Wednesday 8:30am to 9am and 12noon to 1pm
Tuesday and Thursday 12:15pm to 1pm and 2:15pm to 3pm
Friday 9am to 10am and 11am to 12noon
& by appointment

Required Texts:

'A Problem Solving Approach to Mathematics for Elementary School Teachers', by Billstein, Libenski and Lott; 8th edition and 'Great Graphs and Sensational Statistics', by Lynette Long.

Grading Policy: There will be 6 in-class exams (worth 100pts each), 1 Homework Journal (worth 100pts), 2 Projects (worth 50pts each), and 1 cumulative final (worth 200pts). Grades will be determined by the percentage of points accumulated (1000 possible points).

Attendance Policy: Attendance is required and no unexcused absences are given. No late homework is accepted and you may make up exams only if arrangements are made prior to the date of the exam. Students are obligated to complete all assignments by the due dates and to participate in all class discussions.

Exam Schedule:

Exam #1	1/29	Introduction to Statistics
Exam #2	2/12	Counting/Pascal's Triangle
Exam #3	2/26	Probability/Binomial Theorem
Exam #4	3/20	Observational Studies and Experiments
Exam #5	4/3	Research Studies / Research Questions
Exam #6	4/22	Hypothesis Testing (Z-Tests / T-Tests)
Final Exam	5/6	(@ 11:30am)

Topics Covered:

Math 399:

Counting	1. The Fundamental Counting Principle 2. Counting And, Or and Mutually Exclusive Events 3. Permutations and Combinations 4. Trees and Counting Techniques 5. Pascal's Triangle and the Binomial Theorem 6. What is Probability
Chapter 7	7.1 How Probabilities are Determined 7.2 Multistage Experiments with Tree Diagrams and Geometric Probabilities 7.3 Using Simulations in Probability 7.4 Odds, Conditional Probability and Expected Value 7.5 Using Permutations and Combinations in Probability * Binomial Experiments
Chapter 8	8.1 Statistical Graphs 8.2 Measures of Central Tendency and Variation 8.3 Abuses of Statistics
Support Material	*What is Statistics? *Observational and Experimental Studies * What are the four Levels of Measurement? *Three Types of Educational Research * Identifying and Stating Research Questions

Grading Scale (%): *** See General Education Goals Below**

A : 92-100
B+: 88-91
B : 82-87
C+: 78-81
C : 72-77
D+: 68-71
D : 60-67
F : Below 60