COLLEGE OF THE MARSHALL ISLANDS  
COURSE OUTLINE

CIP No. 27.0399

EDU 250  
Alpha Number

Mathematics for Elementary Teachers II  
Course Title

Course Description
Part II of a two-part course designed to provide students with a broad understanding of basic mathematical concepts, their properties, and applications. Emphasis continues on the use of problem solving and reasoning through hands-on activities. Students will develop methods for teaching mathematics in the elementary classroom and students will participate in field experience to observe and apply mathematics activities.

Course prepared by:  Education and Mathematics Departments  
October 2009

<table>
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<tr>
<th>Lecture</th>
<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<td>3</td>
<td>16</td>
<td>48</td>
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Purpose of Course:  
Degree Requirement  X
Degree Elective
General Education
Certification
Developmental
Other

Prerequisite(s)  
C or better in EDU 150

Signature, Curriculum Committee Chairperson  
Dec 4, 2013

Signature, Dean of Academic Affairs  
Dec 4, 2013

Signature, Vice President of Academic and Student Affairs  
Dec 4, 2013

Last Date reviewed or revised: November 2013
I. **Mathematics for Elementary Teachers II**
   **Course Title**

II. **Course Objectives**

   A. General Outcomes

   Students will:
   1. Convey mathematical thoughts and ideas clearly and concisely in oral and written form (EDU 1, 5)
   2. Demonstrate mathematics constructively through the use of manipulative devices, models, and diagrams in an elementary classroom setting (EDU 1, 4)
   3. Apply mathematical thinking and modeling to problems in various contexts (EDU 4, 5)
   4. Implement hands-on activities for teaching mathematical concepts (EDU 4, 5)

   B. Student Learning Outcomes

   Upon completion of this course, the student will be able to:
   1. Communicate verbally and in writing algorithms developed in problem solving
      a. Apply multiple strategies to problem solving
      b. Use deductive and inductive reasoning
   2. Demonstrate real world situations using manipulatives, graphs, algebraic expressions, spatial, and proportional reasoning
   3. Select appropriate problem solving strategies and apply them to real world situations involving statistics and probability, plane figures, angle measure, area, volume, capacity, weight, and mass
   4. Present and assess the effectiveness of activities that address RMI Mathematics Curriculum standards

III. **Course Content**

   The course reexamines basic elementary school mathematics to understand underlying concepts better and to learn why mathematical procedures and formulas actually work.

   1. Teaching of mathematical concepts
   2. Practical and interdisciplinary application of mathematical concepts
   3. Designing hands-on activities for teaching mathematical concepts
   4. Fundamental concepts involving plane and 3-dimensional geometry, measurement, statistics, and probability

IV. **Methods of Instruction**

   1. Field observation and practice
   2. Cooperative learning
   3. Journal writing
   4. Hands-on activities
   5. Demonstrations/presentations

V. **Equipment and Materials**

   1. Manipulatives
   2. Rulers
   3. Compasses
   4. Protractors
5. Graph paper
6. Calculators
7. RMI Mathematics Curriculum Standards

VI. Suggested Methods of Evaluation

1. Quizzes
2. Homework
3. Assignments
4. Class participation
5. Exams
6. Lesson demonstration
7. Activity projects

Letter grades will be assigned per CMI Grading System