COLLEGE OF THE MARSHALL ISLANDS
COURSE OUTLINE

CIP No. 13.1206

<table>
<thead>
<tr>
<th>EDU 251</th>
<th>Science for Teachers</th>
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<tbody>
<tr>
<td>Alpha Number</td>
<td>Course Title</td>
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**Course Description**
Surveys topics in Biology and Environmental Science that are found in the RMI science curriculum. Provides students with a hands-on approach to motivate elementary science students as they investigate the world around them. Emphasizes the need for content knowledge coupled with engaging activities for the effective elementary science teaching. Topics will be presented through an inquiry-based teaching strategy and will model how to create a student-centered, activity-based classroom.

Course prepared by: *Education/Science Department*  
*March 2004*

<table>
<thead>
<tr>
<th>Lecture</th>
<th>3</th>
<th>15</th>
<th>45</th>
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<tbody>
<tr>
<td>Laboratory</td>
<td>2.5</td>
<td>15</td>
<td>37.5</td>
<td>1</td>
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<tr>
<td>Clinical</td>
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<td>Seminar</td>
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**Total Credit Hours**: 4

**Prerequisite(s)**
Education major  
C or better in ENG 102

**Signature, Curriculum Committee Chairperson**  
*Dec 4, 2012*

**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
II. Course Objectives

A. General Outcomes

Students will:
1. Explore a variety of strategies and techniques that promote effective science instruction (EDU 1, 3, 6)
2. Understand the use of scientific measurement to analyze information and solve problems (EDU 4, 5)
3. Display knowledge of the RMI elementary science curriculum, content, and scope and sequence (EDU 1, 2, 3)
4. Investigate science methods that develop elementary students' critical thinking skills (EDU 5)

B. Student Learning Outcomes

Upon completion of this course, the student will be able to:
1. Use a variety of resources including children's literature to develop investigative activities that motivate students' discovery of science concepts and information.
2. Accurately use standard laboratory tools, including microscopes and metric tools for recording volume, mass, length, and temperature; make observations, manipulate materials, collect data, and draw conclusions related to both lab work and research.
3. Plan and demonstrate appropriate grade level inquiry-based science activities
4. Develop a collection of reference materials, etc. for use in the elementary classroom.

III. Course Content

Students will be provided with an introduction to major topics from the fields of biology and environmental science and hands-on investigative activities.

1. Cellular biology
2. Taxonomy
3. Metric system
4. Chemistry
5. Environmental science

IV. Methods of Instruction

1. Small group activities
2. Supervised practice
3. Manipulation of materials
4. Laboratory exercises
5. Field trips
6. Lecture with demonstrations
V. Equipment and Materials

1. Science laboratory
2. Overhead/LCD projectors

VI. Suggested Methods of Evaluation

1. Laboratories
2. Assignments
3. Reports
4. Projects
5. Quizzes
6. Lab examinations
7. Oral presentations

Letter grades will be assigned per CMI Grading System
# Course History Summary

**Course Number:** EDU 261  *Science for Teachers*  

<table>
<thead>
<tr>
<th>Date from Minutes</th>
<th>Action</th>
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<tr>
<td>3-04</td>
<td>Written</td>
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<tr>
<td>10-07</td>
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<td>1-30-09</td>
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Δ *Crosslist on page II*