# COLLEGE OF THE MARSHALL ISLANDS
## COURSE OUTLINE COVER SHEET

**SC 245**  
**Alpha Number**

**Principles of Aquaculture**  
**Course Title**

**Course Description**

Introduction to the world of aquaculture with an emphasis on marine species particularly those species in the Pacific that have traditional or commercial value. Emphasizes seaweed, corals, giant clams and pearl oysters. Shows different production systems used in aquaculture and introduces marketing, economics and the production process.

Course prepared by:  
*Donald Hess*  
*Sept. 2003*

**Liberal Arts and Science Department**

<table>
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<tr>
<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<td>3</td>
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<td>Laboratory</td>
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<td>Clinical</td>
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<td>Seminar</td>
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Total Credit Hours **4**

**Purpose of Course:**

- Degree Requirement
- Degree Elective: X
- Certification
- Developmental
- Other

**Prerequisite(s):**

SC 135 – Marine Science

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**Signature, Curriculum Committee Chairperson**  
*10/16/03*  
Date

**Signature, Dean of Instruction**  
*10/16/03*  
Date

**Signature, President, CM**  
*10/16/03*  
Date

**Subsequently Reviewed by** or **Biannual Review by**
I. **Principles of Aquaculture**  
*SC 225*  
*Course Title*  
*Alpha Number*

II. **Course Objectives**

A. **General Objectives**

The student will:
1. Understand the basic principles and importance of aquaculture in the world and the Pacific region
2. Learn the production systems and the nature of controls for seaweed, corals, giant clams and pearl oyster cultures
3. Develop a basic understanding of marketing and economic principles of aquaculture

B. **Specific Objectives**

Upon completion of this course, the student will be able to:
1. Present the history of aquaculture
2. Explain aquaculture policy in general and specifically in the RMI
3. Describe the culturing of seaweed and its impact on the environment
4. Explain the rearing and farming techniques for zooplankton, corals and fish
5. Describe the commercial and economic issues related to aquaculture
6. Identify important biological and ecological features of giant clam and pearl oysters
7. Demonstrate grow-out techniques for various species
8. Explain the possible environmental consequences of aquaculture development

III. **Course Content**

1. History of aquaculture
2. Seaweed biology, ecology and culturing
3. Aquaculture policy and best management practices
4. Economics of aquaculture
5. Zooplankton
6. Corals
7. Shrimp and fish farming
8. Giant clams
9. Pearl oysters

IV. **Text(s)**

There are no texts for this class. Handouts will be provided for the various areas.

V. **Current References and Other Supplementary Learning Resources**

- Parker, Rick, *Aquaculture Science* Delmar, Australia 2002

VI. **Methods of Instruction**

Lecture, labs, group work, individual work, field trips

VII. **Equipment and Materials**

VCR, television, transportation, LCD projector

VIII. **Suggested Methods of Evaluation**

Quizzes, tests, lab reports, homework
Letter grades will be assigned per CMI Grading System.
Course History Summary

Course Number: SC 225 Principles of Aquaculture (4)

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