Integrated Coastal Management

Course Description
Introduces coastal resource management. Includes both living and non-living resources and investigates integrated management in the context of sustainability.

Course prepared by: Karl Fellenius/Donald Hess

Math Science Department

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<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>Seminar</td>
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Total Credit Hours 4

Purpose of Course: Degree Requirement
Degree Elective
Certification
Developmental
Other

Prerequisite(s) SCI 135

Signature, Curriculum & Assessment Committee Chairperson

Signature, Dean of Academic Affairs

Signature, Vice President for Academic and Student Affairs

Last Date reviewed or revised: Sept. 2008
I. Integrated Coastal Management

II. Course Objectives

A. General Outcomes

Students who complete this course will:
1. Learn the principles of resource management (LA 1, 2, 3, 4)
2. Have a physical overview of the marine environment both living and non-living (LA 1, 4)
3. Understand the concept of sustainability (LA 1, 4)
4. Understand the principles of integrated coastal management, globally and locally (LA 1, 2, 4)
5. Learn planning and management tools and approaches (LA 1, 2, 4)

B. Student Learning Outcomes

Upon completion of this course, the student will be able to:
1. Analyze the principles of resource management
   a. Identify the scope and conflict of human activity in coastal areas and the institutional legal mechanisms for their management
   b. Analyze the basics of policy, planning, and management of natural resources
   c. Demonstrate alternative dispute resolution and decision making
2. Describe linkages between the diversity of coastal ecosystems and selected ecological impacts
3. Describe the concept of sustainability and its ecological, social, and economic imperatives
4. Identify the principles of integrated coastal management
   a. Discuss ecological management concepts and frameworks for data gathering
   b. Define ecological economics
5. Demonstrate the principles of integrated coastal management
   a. Conduct impact assessments
   b. Analyze concepts involved in marine conservation and methods
   c. Demonstrate different approaches to coral reef conservation

III. Course Content

Introduction to the proper use and protection of coastal resources such as beaches, reefs, mangrove forests, embayments, etc.

1. Introduction to coastal resources
2. Human activity and resource use
3. Policy planning and management
4. Alternative dispute resolution in processes related to coastal management
5. Sustainability of coastal ecosystems
6. Ecological economics
7. Impact assessments
8. Conservation and protected areas
9. Public participation in the process of integrated coastal management

IV. Methods of Instruction

1. Lecture
2. Laboratory, including field trips
3. Small groups
V. Equipment and Materials

1. VCR/DVD
2. Computers
3. LCD projector
4. Snorkel gear

VI. Suggested Methods of Evaluation

1. Exams
2. Written reports
3. Local case study project

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

**Course Number:** SCI 245 *Integrated Costal Management* (4)

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<th>Date from Minutes</th>
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