

## MASTER OF SCIENCE IN COASTAL RESOURCE MANAGEMENT\*

(2012 – 2013 Curriculum Update)

Revisions: Apart from changes in subject numbers – Socio-cultural Impacts on the Environment changed to *Socio-cultural Perspectives of CRM* (original description); Hydrgraphic Studies to *Hydrography and Mapping*.

Added subject: CRM 200. Residency (3) – three units in parenthesis; CRM 150. Seminar in CRM; CRM 250. Practicum for students enrolled in Diploma in CRM.

Classification	Subject Number	Subject Description	Total Number of Units	Lecture		Laboratory	
				Units	Contact Hours	Units	Contact Hours
Core Subjects (15 units)	CRM 101	Ecosystems	3	2	2	1	3
	CRM 102	Socio-cultural Perspectives of CRM	3	2	2	1	3
	CRM 103	Environmental Laws and Policies	3	1	1	2	6
	CRM 105	Elements of Research	3	2	2	1	3
Major Subjects (9 units)	CRM 111	Administration of Coastal Resources	3	2	2	1	3
	CRM 112	Capacity Building	3	2	2	1	3
	CRM 113	Environmental Economics & Sustainable Dev't	3	2	2	1	3
	CRM 114	Design and Planning of the Coastal Zone	3	2	2	1	3
	CRM 115	Human Population and the Coastal Zone	3	2	2	1	3
	CRM 116	Environmental Impact and Resource Assessment	3	2	2	1	3
	CRM 117	Information Technology	3	2	2	1	3
	CRM 118	Hydrography and Mapping	3	1	1	2	6
	CRM 119	Information Technology	3	1	1	2	6
Free Electives (6 units)	CRM 121	Environmental Communication Techniques	3	2	2	1	3
	CRM 122	Water Quality Management	3	2	2	1	3
	CRM 123	Land Use	3	2	2	1	3
	CRM 124	Aquaculture and the Environment	3	2	2	1	3
	CRM 125	Fisheries Management	3	2	2	1	3
	CRM 126	Pollution in the Coastal Zone	3	2	2	1	3
	CRM 127	Travel and Tourism Industry Management	3	2	2	1	3
	CRM 150	Seminar in CRM	3	2	2	1	3
Practicum	CRM 250	Practicum (Diploma in CRM students)	3			3	9
Residency	CRM 275	Residency	(3)			3	9
Masters Thesis	MB 300	Masters Thesis	6			6	18

Coverage of Comprehensive Exams: Total number of topics = 6

- (1) Ecosystems
- (2) Socio-cultural Perspectives of CRM
- (3) Principles and Techniques of CRM
- (4) Elements of Research
- (5) One Topic from Major Subjects
- (6) One Topic from Electives

\* Allocations for lecture/laboratory contact hours for subjects in Certificate/Diploma/MS in CRM are the same.

## COURSE DESCRIPTIONS

### **CRM 101 Ecosystems (3 units)**

Focuses on the different ecosystems, their components and interactions between them, with special emphasis on coastal ecosystems

### **CRM 102 Socio-cultural Perspectives of CRM (3 units)**

### **CRM 103 Environmental Laws and Policies (3 units)**

An overview of the existing international and national laws which are relevant to the environment

### **CRM 105 Elements of Research (3 units)**

An introduction of the basic principles of scientific research including techniques in the collection, analysis and presentation of data

### **CRM 111 Administration of Coastal Resources (3 units)**

Policies in the administration of resources, specially coastal resources; includes communal ownership, tenure, open access and community-based equitable allocations of coastal resources.

### **CRM 112 Capacity Building (3 units)**

A leadership challenge to aid in the development of characteristics desirable in community workers; includes techniques in dealing with communities, traditional leaders and politicians and in organizing communities and resolving conflicts.

### **CRM 113 Environmental Economics & Sustainable Dev't (3 units)**

Analyzes the intrinsic value of natural resources; the profits derived from a development enterprise as against the long term of mitigation and regeneration of damaged ecosystems.

### **CRM 114 Design and Planning of the Coastal Zone (3 units)**

Analysis of design and plan (functional, economic, social, aesthetic); factors for consideration during the planning process; impact(s) of the design and plan on the environment; feasibility studies of the proposed development.

### **CRM 115 Human Population and the Coastal Zone (3 units)**

Analysis of the impacts on human populations on the coastal zone; includes the collection, analysis and presentation of demographic data.

### **CRM 116 Environmental Impact and Resource Assessment (3 units)**

Identification of parameters for consideration in EIRA; factors considered in the selection, modification and development of EIRA methods; analysis of impacts on the environment.

### **CRM 117 Information Technology (3 units)**

Concepts in environmental education, techniques in the dissemination of environmental information; development of communication skills.

### **CRM 118 Hydrography and Mapping (3 units)**

Focuses on the measurements of physical characteristics (conditions, boundaries and others) of waters and marginal lands; includes the use of computer programs such as Google Earth and mapping programs such as autocad, surfers and others.

### **CRM 119 Information Technology (3 units)**

Concepts in environmental education, techniques in the dissemination of environmental information; development of communication skills.

**CRM 121 Environmental Communication Techniques (3 units)**

**CRM 122 Water Quality Management (3 units)**

Biological and chemical characteristics of water, methodologies of water analysis (coliform counts, total suspended solids and sedimentation, phosphates and nitrates); significance of water quality to the coastal zone and its inhabitants.

**CRM 123 Land Use (3 units)**

Use of land both in the upland and coastal environments with emphasis of the landscape approach to the wise utilization of resources.

**CRM 124 Aquaculture and the Environment (3 units)**

Study of existing aquaculture and mariculture techniques; design, management and economics of the techniques and the impacts of these techniques to the environment (includes water management, land conservation, use of chemicals)

**CRM 125 Fisheries Management (3 units)**

**CRM 126 Pollution in the Coastal Zone (3 units)**

Air, water and soil pollution with emphasis on the roles of the coastal populations.

**CRM 127 Travel and Tourism Industry Management (3 units)**

The identification and development of features in the locality that have a tourism potential; requirements for the development of the site (feasibility studies, information collection and dissemination); management techniques involved travel and tourism, identification of potential effects to tourism on the locale.

**CRM 150 Seminar in CRM (3 units)**

**CRM 250 Practicum (Diploma in CRM students)**