

## Coral Reef Ecology - Course Syllabus

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**Course Number:** MarS 226

**Course Title:** Coral Reef Ecology

**Academic Semester:** Spring

**Academic Year:** 2015/ 2016

**Semester Start Date:** Jan, 24, 2016

**Semester End Date:** May, 19, 2016

**Class Schedule:** Sunday-Thursday, 8am-5pm

**Classroom Number:** TBD

**Instructor(s) Name(s):** Michael Berumen

**Email:** michael.berumen@kaust.edu.sa

**Teaching Assistant name:**

**Email:**

**Office Location:** Building 2, Office 3221

**Office Hours:** by appointment

### COURSE DESCRIPTION FROM PROGRAM GUIDE

This course will cover coral reef distributions, biogeography, and ecological processes important to reefs. Basic coral anatomy and physiology will be discussed. Reef fishes and their interaction with coral communities will be highlighted, along with coral reef fisheries. Modern threats to coral reefs, including thermal bleaching, ocean acidification, and diseases of corals will be examined with particular emphasis on processes affecting the future status of reef communities.

### COMPREHENSIVE COURSE DESCRIPTION

This course will focus on several aspects of the ecology of coral reef ecosystems. This includes coverage of coral reef distributions, biogeography, and ecological processes important to reefs. Basic coral anatomy and physiology will be discussed. Reef fishes and their interaction with coral communities will be highlighted, along with coral reef fisheries. Modern threats to coral reefs, including thermal bleaching, ocean acidification, and diseases of corals will be examined with particular emphasis on processes affecting the future status of reef communities.

## GOALS AND OBJECTIVES

Students should gain a working knowledge of the current state of research in the aforementioned areas. Provided that logistic arrangements can be made, there will be some emphasis placed on field skills and sampling methodology.

## REQUIRED KNOWLEDGE

MarS 221 is a prerequisite for this course.

## REFERENCE TEXTS

*The Biology of Coral Reefs* (Sheppard, Davy, and Pilling)

*Coral Reef Fishes* (Sale)

*Coral Reef Guide: Red Sea* (Lieske and Meyers)

Other texts as assigned by the instructor

## METHOD OF EVALUATION

Percentages %	Graded content
30%	<b>Class Participation: This is a graded component of the course, and includes in-class discussions and attendance, contribution of literature for the course, etc.</b>
20%	<b>Assignments: This includes presentations made to the class and reading assignments.</b>

## COURSE REQUIREMENTS

### Assignments

The course may include assigned reading from textbooks and from primary literature; literature searches on assigned topics; presentations to the class based on readings or other research; and/or a written assignment.

### Course Policies

Attendance is mandatory to all lectures.

Participation is a significant component of the grade.

As a block course, students are expected to be available at any time and on short notice during the block period.

Any anticipated absence should be cleared with the instructor by written (email) notification as early as possible. Students with approved absences are responsible for catching up on the materials from their classmates.

**Additional Information**

It is strongly preferred that communications are via email. For urgent issues, the instructor may be reached by phone (number will be provided to the class).

**NOTE**

The instructor reserves the right to make changes to this syllabus as necessary.