

# Environmental Education, Training and Research, at Qatar University

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## Environmental Education

# New Program



**Undergraduate Curriculum for the B.Sc. in Environmental Science**  
124 or 125 credit hours (8 semesters)

- Opens - Fall 2008 (Females)  
- Fall 2009 (Males)

## Options for Specialization

**Track 1 Environmental Science with Specialization in Biotechnology (125 credit hours; 8 semester)**

**Track 2 Environmental Science with Specialization in Marine Sciences (124 credit hours; 8 semesters)**

- Research Emphasis
- Environmental Health
- Internships with Stakeholders

## An Inter-Disciplinary Program

**Biological Science and Participating Departments in the Colleges of Arts and Science, Engineering, and Law**

- Interdisciplinary

# CORE Courses



(CORE) Compulsory Courses		54
BIOL 101	Biology 1	3 (2+3) Biological/Env. Sciences, CAS
BIOL 102	Biology 2	3 (2+3) Biological/Env. Sciences
BIOL 221	Basic Ecology	3 (2+3) Biological/Env. Sciences
BIOL 241	Microbiology	3 (2+3) Biological/Env. Sciences
BIOL 496	Research	3 Biological/Env. Sciences
BIOL 499	Internship	P/F Stakeholders
MARS 101	Intro. Marine Science	3 (2+3) Marine Sciences, CAS
MARS 251	Marine Biology	3 (2+3) Marine Sciences
CHEM 275	Principles of Environmental Chemistry	3 (2+3) Chemistry
BIOL 322	Desert Biology	3 (2+3) Biological/Env. Sciences
BIOL 422	Environmental Management/Conservation	3 (2+3) Biological/Env. Sciences
GEOG 442	Environment and Pollution	3 Geography, CAS
CVEN 051	Waste Management	3 College of Engineering (Civil)
CVEN 041	Water Resources and Management	3 College of Engineering (Civil)
GENG 107	Engineering Skills and Ethics	3 College of Engineering (Chemical)
GENG XXX	Petroleum/Gas Technologies	3 College Engineering (Chemical)
BIOL 345	Health, Safety and Environment	3 Stakeholders
MARS 459	Environmental Impact Assessment	3 Marine Sciences
LAWC 449	Environmental Law and Regulations	3 College of Law


## Key Courses



- SOCI 200 Sustainable Development 
- BIOL 103 Freshman Seminar
- BIOL 345 Health, Safety and Environment
- MARS 459 Environmental Impact Assessment
- LAWC 449 Environmental Law and Regulations
- BIOL 346 Environmental Health
- BIOL 433 Monitoring and Toxicology

## BIOL 346 Environmental Health



- Toxic Substances and the Environment
- Climatic Conditions and Health
- Health and the Environment  Research
- Infectious Diseases and the Environment (Epidemiology)
- Pest Control

# BIOL 345 Health, Safety and Environment



“... explore the potential for accreditation of the course on Health, Safety and Environment”

*Program Reviewer 2007*




# Environmental Resources



- Electronic Course Outlines
- Research News



**B.Sc. in Environmental Science** 

Course Listing

New Course   Yes  No

On-line Section?  Yes  No

Course Name: Freshman Seminar

Course Number:

Pre-Requisite(s):

Course Category: Supporting Complicity

Semester Offered: Spring

First Year Taught: 2008

Year in 4-year Syllabus: FIVE

Credit Hours: FIVE

With Laboratory?  Yes  No

Department: Biological and Environmental Sciences

College: Arts and Sciences

Instructor (Name): To be determined

Rank: Visiting Scientist

**Short Catalog Listing:**  
The course will be given in the second semester of the freshman year. Faculty involved in the program, as well as invited external speakers (including stakeholders), will provide "snapshot" general overview presentations of selected topics of relevance to the core curriculum. There is one presentation or review.

**Detailed Course Outline:**  
The seminar consists of four modules. Each module has a different theme and consists of three different presentations (from three different disciplines) and a review session. The outline of the presentations scheduled for Spring 2009 is provided below.

**Course Objectives and Learning Outcomes:**  
Students must be able to:

- 1) Listen to and view content, and ask appropriate questions.
- 2) Evaluate the major points of each presentation through oral and written responses.
- 3) Work in small teams of students.



## Environmental Training



### The M.Sc.: How to Get There

- NPRP from Qatar National Research Fund 2008 - 2011
- “A Middle East Research Consortium (MERC)”
- Department of Biological and Environmental Sciences and the Center for Biotechnology, Sfax (CBS), Tunisia
- 95 Ph.D. students at CBS - Infrastructure
- Student Exchanges and Training



# Environmental Research



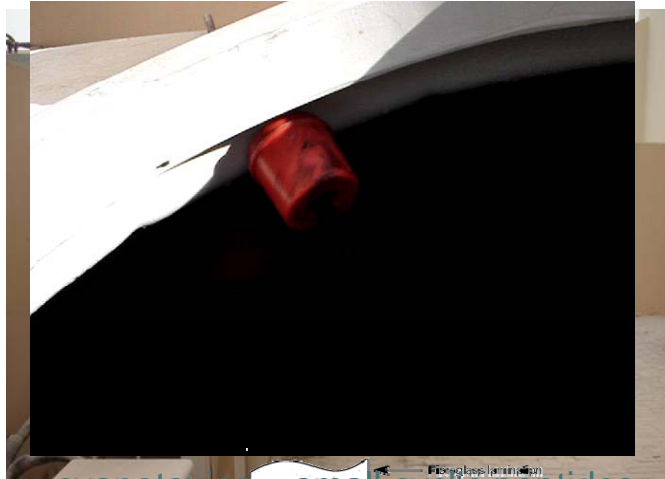
## Example Initiatives

- C
- B
- A
- V



cyanobacteria

# Potable Water



cyanotoxins – small cyclic peptides



Fiberglass Reinforced Plastic (FRP)  
Potability Enhancer - Anti-fungus Anti-bacterial Black Gelcoat