

### A- Basic Information

<b>Programme(s) on which the course is given:</b>	MSc of Fish Biology and Aquatic Ecology
<b>Department responsible for offering the course:</b>	Zoology
<b>Department responsible for teaching the course:</b>	Zoology
<b>Academic year:</b>	2012-2013
<b>Course title and code:</b>	<b>Environmental Science Z671</b>
<b>Contact hours (credit hours):</b>	Lecture: 2 hrs      Practical: 2hrs Total: 3 hrs
<b>Course coordinator:</b>	Prof. Mansour Galal

### B- Professional Information

The course aim and intended learning outcomes are based on that mentioned in the programme specifications, with more course-related specific details.

#### **1- Overall Aims of Course: By the end of this course, the student should be able to**

- \* Identify the concepts of environmental science.
- \* Outline the environmental science's role in scientific issues and relevant applications of environmental science in society.
- \* Develop scientific inquiry and investigative skills.
- \* Improve scientific analytical thinking skills in an environmental science context.
- \* Use technology, equipment and materials safely in practical scientific activities.
- \* Develop problem solving and practical fieldwork skills in an environmental science context.

#### **2- Intended Learning Outcomes of Course (ILOs):**

a- Knowledge and Understanding:

- a1- Describe of various kinds of ecosystems.
- a2- List different abiotic environmental factors.
- a3- Illustrate various types of diversity of ecosystems.

a4- Outline the meaning of wild life management.

**b- Intellectual Skills:**

b1- Build the ability to differentiate between different types of environments and various ecological tools and techniques.

b2- Evaluate the ability of different organisms to accommodate with different ecological factors.

**c- Professional and Practical Skills:**

c1- Perform investigations related to the living environment.

c2- Explore the environmental issues related to ecosystems and inter-relationships.

c3- Explore the sustainability issues related to ecosystems and biodiversity.

**d- General and Transferable Skills:**

d1- Use internet and data show to present different deserts and their inhabitats.

d2- Improve writinc up and oral communication skills.

### 3- Course Contents

Topic	No. of hours	Tutorial/ Practical	Lecture
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<b>Preliminary of Ecology.</b>	<b>4</b>		<b>2</b>
<b>Biotic components of different ecosystems.</b>	<b>3</b>	<b>1</b>	<b>1</b>
<b>Abiotic components of different ecosystems.</b>	<b>2</b>		<b>1</b>
<b>Dynamics of ecosystem.</b>	<b>2</b>		<b>1</b>
<b>Aquatic ecosystem (Freshwater, marine and man-made ecosystems)</b>	<b>5</b>	<b>1</b>	<b>2</b>
<b>Pollution and factors affecting pollution.</b>	<b>4</b>		<b>2</b>
<b>Conservation of natural resources.</b>	<b>3</b>	<b>1</b>	<b>1</b>
<b>Wild life management.</b>	<b>5</b>	<b>1</b>	<b>2</b>

#### 4- Teaching and Learning Methods

- Lectures.
- Research assignment.
- Oral Presentation.

#### 5- Student Assessment Methods

- Written Exams.
- Reports
- Oral exams.
- Oral Presentations.
- Practical exams.

#### Assessment schedule

Assessment 1 report every three weeks.

Assessment 2 Mid-term exams Week 7

Assessment 3 Final term exam Week 14

#### Weighting of assessments

Mid-term examination	20%
Final-term examination	40%
Oral examination	10%

Practical examination	20%
Reports	10%
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Total	100%

**6- List of references**

**1. Course Notes**

Related websites using internet facilities in the college.

**2. Essential Books (Text books):**

- Environmental Biology.
- Environmental Pollution.

**3. Periodicals, Web sites, ....etc.**

- Biological abstracts.
- Aqualine.
- Science direct.

**7- Facilities required for teaching and learning**

- \* Data show.
- \* Slide and over-head projector.
- \* Librarian facilities.
- \* Computers with internet Access.

**Course coordinator:** Prof. Mansour Galal

**Head of Department:** Prof. Saber Sakr