

## Course Specification

### A- Basic Information

<b>Programme(s) on which the course is given:</b>	MSc of General Physiology
<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>	Radiobiology      Z 6124
<b>Contact hours (credit hours):</b>	Lecture: 2 hrs      Practical: 0hrs Total: 2 hrs
<b>Course coordinator:</b>	

### 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

\*Be aware with radiation sources bioassay methods and characters of ionizing radiations.

\*Describe radiation protection and control.

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

##### a- Knowledge and Understanding:

a1- Discuss the application of radiation.

##### b- Intellectual Skills:

b1- To identify the source of radiation and their pollution.

##### c- Professional and Practical Skills:

c 1- Be familiar with the effect of ionizing radiation and other environmental radioactive pollution.

##### d- General and Transferable Skills:

d1: Develop the scientific writing skills

d2: Enhance the oral communication during presentation.

### 3- Course Contents

Topic	No. of	Tutorial/	Lecture
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	hours	Practical	
Sources of ionizing radiation	2	-	2
Characteristic of ionizing radiation, radiation units.	2	-	2
Molecular effect of radiation.	2	-	2
Organic damage from ionizing radiation	2	-	2
Interaction of radiation with matters.	2	-	2
Management of internal and external radioactive contamination	2	-	2
Target theory	2	-	2
Biological dosimetry	2	-	2
Radiation protection and control	2		2
Application of radiation	2	-	2

#### 4- Teaching and Learning Methods

- Lectures.
- Practical sessions.
- Writing essays.
- Oral presentation.

#### 5- Student Assessment Methods

- Essays
- Oral exams
- Written exams.
- Practical exams.
- Quizzes.

#### Assessment schedule

Assessment 1	Essay	Week 1 essay/term
Assessment 2	Oral exam	Twice/term
Assessment 3	Mid-term exams	Week 7
Assessment 4	Semester Work Exam	Week 10
Assessment 5	Final term exam	Week 14

#### Weighting of assessments

Mid-term examination	20%
Final-term examination	40%
Oral examination	10%
Practical examination	20%
Semester work	10%
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Total	100%

## **6- List of references**

### **6.1- Course Notes:**

- \* Lecture notes.

### **6.2- Essential books (text books)**

- \* Text book of Radiobiology.
- \* Radiobiological information
- \* Notes in radiobiology

### **6.3- Recommended books:**

#### **6.4- Periodicals, Web sites....Etc:**

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

- \* Dark room equipped with overhead and LCD projector.
- \* Laboratory with suitable equipments.
- \* Librarian facilities.
- \* Computers with internet Access.

***Course coordinator:***

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

***Date:*** 15/1/ 2013