Course Specification

A- Basic Information

Programme(s) on which the course is given:	MSc of General Physiology
Department responsible for offering the course:	Zoology
Department responsible for teaching the course:	Zoology
Academic year:	2012-2013
Course title and code:	Radiobiology Z 6124
Contact hours (credit hours):	Lecture: 2 hrs Practical: 0hrs Total: 2 hrs
Course coordinator:	

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

	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 exms
- 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%
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