

Course Specification

A- Basic Information

Programme(s) on which the course is given:	Diploma of Hematology
Department responsible for offering the course:	Zoology
Department responsible for teaching the course:	Zoology
Academic year:	2012-2013
Course title and code:	Radiobiology Z 5124
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 hours	Tutorial/ Practical	Lecture
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%
<u>Semester work</u>	<u>10%</u>
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