

Course Specification

A- Basic Information

Programme(s) on which the course is given:	MSc of Cytology, Histology and Histochemistry
Department responsible for offering the course:	Zoology
Department responsible for teaching the course:	Zoology
Academic year:	2012-2013
Course title and code:	Advanced cell biology Z621
Contact hours (credit hours):	Lecture: 2 hrs Practical: 2hrs Total: 3 hrs
Course coordinator:	Dr. Samah Mohamed Abo – El Yazid

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

- * Make the student aware of the organelles in the cell.
- * Outline some advanced techniques.
- * Describe the functions and role of every organelle.
- * Make the student aware of the cellular immunology

2- Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

- a1- Identify the functions and structures of each organelle .
- a2- illustrate how these organelles work together to perform the cell function

b- Intellectual Skills:

- b1- Provides the student with fruitful information about these structures.
- b2- Imaging the principle role of each.

c- Professional and Practical Skills:

- c1- Be aware of the structure of cells and how they work.
- c2- Be aware of cell organelles under electronmicroscope.

d- General and Transferable Skills:

- d1- Increasing student's ability to examine the cell & its structure.
- d2- Enhancing their imaginative power about what is happening in the cell.
- d3-develop skills in reading and researching.

d4-Develop team work skills

d5-Use different sources of informations .

3- Course Contents

Topic	No. of hours	Tutorial/ Practical	Lecture
Advanced Techniques	4	1	2
Cell Membrane	2	1	1
Membrane transport ,Membrane potential, Protein,storing,Cellular immunology	2	1	1
Mitochondria	2	1	1
Ribosomes and Endoplasmic Reticulum	2	1	1
Golgi Apparatus	2	1	1
Lysosomes	2	1	1
Cilia and Flagella	2	1	1
Nucleus	2	1	1
Cell Division	2	1	1
Cell Cycle, cytoskeleton	4	1	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

1. Course Notes

- 1- Internet and library material.
- 2- Handouts given separately during the course span.

2. Essential Books (Text books):

- 3- text book of cytology

3. Recommended Books

- 4- Basic Histology.
- 5- Cell Biology.
- 6- Bails Text Book of Histology

4. Periodicals, web sites,....,etc

1. Pubmed.com; cell and molecular biology

7- Facilities required for teaching and learning

- * Dark room equipped with overhead and LCD projector.
- * Laboratory slides and specimens.
- * Librarian facilities.
- * Computers with internet Access.

Course coordinator: Dr. Samah Mohamed Abo – El Yazid

Head of Department: Prof. Saber Sakr