

Course Specification

University: Menoufiya

Faculty: Science

Course Specifications:

Programme (s) on Which the Course is Given: Diploma of Hematology

Major or Minor Element of Programmes: Major

Department offering the Program: Zoology

Department offering the Course: Zoology

Academic Year/ Level: -----

Date of Specification Approval: 2010

A- Basic Information

Title: Cell Chemistry

Code: Z5125

Credit Hours: 2

Lecture: 2

Tutorial:0

Practical: 0

Total: 2

B- Professional Information

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

* Know and Understand of cell chemistry.

2- Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

a1- Define the essentials of cellular processes and its chemistry.

b- Intellectual Skills:

b1- Measure the student capability to distinguish the cellular processes and its chemical pathways

c- Professional and Practical Skills:

c1- Demonstrate skills in identification of the cellular processes and its pathways

d- General and transferable Skills:

d1- Measure the scientific writing ability.

d2- Utilize the oral communication skills.

d3- Use appropriate lab equipment.

d4- Use the appropriate technology such as (Internet) for scientific research.

3- Contents

Topic	No. of Hours	Lecture	Practical
Cell structure	2	1	2
Cell membranes chemistry	4	2	4
Channels and the control of membrane potential	4	2	4
Receptors and its regulators	2	1	2

Action potential and its pathways	4	2	4
Synapses	4	2	4
Nuclear and mitochondrial DNA	2	1	2
Cytokine & Hormones and receptors	2	1	2
Revision	2	1	2

4- Teaching and Learning methods

4.1-Lectures.

4.2-Oral presentation.

4.3- Research assignment.

4.4-Practical demonstration.

5- Student assessment methods

5.1-Reports to assess Collection of course material.

5.2- Mid-term exam to assess Mid-term performance.

5.3-Practical and oral exam to assess practical skills.

5.4-Final term exam to assess end of course performance.

Assessment schedule

Assessment1 Mid term Week

Assessment2 semester activities Week 5 and 8

Assessment3 final term practical exam Week 13

Assessment4 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%
Other Types of Assessment	0%
Total	100%

6- List of references

6.1- Essential books (text books)

*Cellular Physiology (David Landowne).

*Cellular and molecular immunology

6.2- Recommended books

* Essentials of Physiology.

* General Physiology

6.3- Periodicals, Web sites, Etc

* Comparative Physiology and Biochemistry.

* Journal of Comparative Physiology..

7-Facilities required for teaching and learning:

- * Lecture room provided with a white board.
- * Dark room equipped with overhead and slide projectors, data show.
- * Lab provided with suitable equipments.

Course coordinator: Prof. Dr. Ibrahim elelaimy

Dr. Hany M. Ibrahim

Head of Department: Prof. Saber Sakr

Date: 15/1/ 2013