

# The University of Jordan

# **Accreditation & Quality Assurance Center**

# **COURSE Syllabus**

1	Course title	Biochemistry
2	Course number	5501321
3	Credit hours (theory, practical)	3
3	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	5501231
5	Program title	Bachelor in Marine Biology
6	Program code	5501
7	Awarding institution	The University of Jordan-Aqaba
8	Faculty	Marine Sciences
9	Department	Marine Biology
10	Level of course	Third year
11	Year of study and semester (s)	first Semester 2014/2015
12	Final Qualification	BSc.
13	Other department (s) involved in teaching the course	non
14	Language of Instruction	English
15	Date of production/revision	2010

# **16. Course Coordinator:**

Prof. Fuad A. Al-Horani, Tel. 03-2090450-35072 Office hours; e-mail; fal\_horani@hotmail.com

#### **17. Other instructors**:

Prof. Fuad A. Al-Horani, Tel. 03-2090450-35072 Office hours; e-mail; fal\_horani@hotmail.com

# **18. Course Description:**

As stated in the approved study plan.

The course deals with the structure of proteins in general and the function of enzymes. The course culminates in an overview of carbohydrates, lipids and integrated cellular metabolism.

#### 19. Course aims and outcomes:

# A- Aims:

The course will provide the students with the basic understanding of the principles of Biochemistry. he topics covered in this course will allow the students to better comprehend other courses related to Biochemistry.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...

#### nowledge and understanding

he end of this module, students will be able to:

- \* Know the structure and properties of amino acids, proteins, enzymes.
- \* Know the enzyme regulation and kinetics.
- \* know the basics metabolic pathways.
- \* lipids and sugars.

#### ognitive skills (thinking and analysis).

- The Thinking and Meditation about the Great Ability of God in Creation of our body and the ogical systems.

- The thinking skills will be developed by encouraging students to conclude answers to different questions that the instructor intends to use during the presentation of the scientific material.
- The instructor intends to stimulate the student's analytical thinking side via connections with general aspects in daily life or through questions, net searching, and home works.

#### 20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Water	1				
Amino Acids, peptides and Proteins	2-3				
The Three-Dimensional Structure of Proteins	4-5				
Enzymes	6-7				
Carbohydrates and Glycobiology	8				
Lipids	9-10				
Glycolysis and Pentose Phosphate pathway	11				
The Citric Acid cycle	12				
Fatty Acid Catabolism	13-14				

#### 21. Teaching Methods and Assignments:

Power point lectures, questions and discussions, videos, home works

Assignments such as preparing of reports on topics related to the subject.

Students are requested to present a power point presentation on a subject of his/her choice within the framework of the study material.

Laboratory and field training are offered.

# 22. Evaluation Methods and Course Requirements:

Mid Term exam, Final Exam, Quizzes, Reports, Talks, Home works, Attendance, General performance

#### 23. Course Policies:

endance policies: Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the college shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

B- Absences from exams and handing in assignments on time:

Absences without a medical or emergency excuse acceptable to and approved by the Dean of the college shall receive a mark of zero

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Attempts to cheat during an exam or plagiarism for the written reports shall lead to a mark of zero in the exam or report and might lead to failure in the course with other consequences according to the regulations of the university.

E- Grading policy:

Mid Term 30%, Reports, research projects, Home works, presentations 15%, Quizzes. 10%, Final Exam 100%

94-100	4	А
87-93	3.75	A-
80-86	3.5	B+
75-79	3	В
70-74	2.75	B-
65-69	2.5	C+
60-64	2	С
55-59	1.75	C-
50-54	1.5	D+
45-49	1	D
40-44	0.75	D-
0-39	0	F

F- Available university services that support achievement in the course:

Library sources are available, internet, laboratory facilities

# 24. Required equipment:

Lab top, data show, white board, and the normal facilities of the lab.

#### 25. References:

A- Required book (s), assigned reading and audio-visuals:

B- Recommended books, materials, and media:

Lehninger Principles of Biochemistry 5<sup>th</sup> Edition. or(s); David L. Nelson and Michael M. Cox isher: W.H. Freeman and Company, New York

In addition to handling support material (s).

# 26. Additional information:

Name of Course Coordinator:Signature: Date:
Head of curriculum committee/Department: Signature:
Head of Department: Signature:
Head of curriculum committee/Faculty: Signature:
Dean:

<u>Copy to:</u> Head of Department Assistant Dean for Quality Assurance Course File