

Course Description Form

1. Course Name:	
Biochemistry II	
2. Course Code:	
VEP2110	
3. Semester / Year:	
Second year / second semesters	
4. Description Preparation Date:	
2024/2/14	
5. Available Attendance Forms:	
second year students	
6. Number of Credit Hours (Total) / Number of Units (Total)	
75 hours/ 3 UNITS	
7. Course administrator's name (mention all, if more than one name)	
Name: Ahmed A. Azeez Email: aliahmed.aam@uokirkuk.edu.iq	
8. Course Objectives	
Course Objectives	<p>1. Acquaintance with the basic principles of biochemistry.</p> <p>2. Identify the metabolism of food that enters the animal feed.</p> <p>Biochemistry is one of the basic medical sciences whose knowledge crystallizes the applied medical sciences (internal medicine, surgery and obstetrics).</p>
9. Teaching and Learning Strategies	
Strategy	<p>A- Cognitive goals .</p> <p>A1- Teaching the student the concept of biochemistry and its general principles</p> <p>A2- Knowledge, understanding and comprehension of the scientific subject curriculum</p> <p>A3- To classify the theoretical and practical needs for the development of learning and teaching in the appropriate manner with the scientific material</p>

A4- Identifying the composition of the chemical substances in the animal's body.

A5 - Identify the methods of metabolism of substances (carbohydrates, proteins and fats)

A6- Studying the structure and classification of hormones and their relationship to the life cycle of an animal and its relationship to the body's biological reactions

A7- Studying the structure of enzymes, their mechanism of action and their effect on chemical reactions.

B. The skills goals special to the course.

B1 - Teaching the student how to draw blood.

B2 - Teaching the student the methods of analyzing basic chemicals that affect animal life.

B3 - Teaching the student the techniques of optical absorbance measurement devices for the purpose of measuring chemicals.

C-Teaching and Learning Methods

C1- Presentation methods: giving lectures to students while they are sitting in front of the teacher, and they listen to him, and he must have the ability to memorize and absorb information.

C2- Dialogue methods: the teacher uses the method of dialogue with the students in the manner of asking questions to the students and discussing the information with the students.

C3- The discovery method: the teacher observes the activities of the students conducting the experiments individually or collectively.

C4- Active methods: the students perform individual or group activities and the teacher takes the students hand towards learning in practical life inside and outside the educational institution and to come into contact with the vocabulary of practical life, which gives meaning to real learning.

C5- Giving lectures using modern methods for presenting power point topics and scientific films.

D - General, qualification and transferable skills (other skills related to employability and personal development).

D1- Team work: working in harmony with the group or team.

D2 - Initiative Motivation to work: the ability to take the initiative,

determine the hypothesis, and develop ideas and proposed solutions.
 D3- Planning & organization: An ability to set plans and programs that are feasible for implementation.
 D 4- Flexibility: adapting to situations.
 D 5- Time management: The ability to work on specific dates.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	5	Lipid transport & storage.	Lipids	Theoretical (3hours) + practical (2 hours)	daily exam
2	5	Lipoproteins	Lipids	Theoretical (3hours) + practical (2 hours)	Homework
3	5	Protein metabolism.	The proteins	Theoretical (3hours) + practical (2 hours)	daily exam
4	5	Anabolism & catabolism of amino acids.	The proteins	Theoretical (3hours) + practical (2 hours)	Homework
5	5	Urea cycle.	The proteins	Theoretical (3hours) + practical (2 hours)	daily exam
6	5	Hormonal action.	Hormones	Theoretical (3hours) + practical (2 hours)	Homework
7	5	Signal transduction.	Hormones	Theoretical (3hours) + practical (2 hours)	
8	4	Mid-term exam.		Theoretical (3hours) + practical (2 hours)	Theoretical (25) and practical (10) exams + reports (5)
9	5	Chemical properties of hormones.	Hormones	Theoretical (3hours) + practical (2 hours)	daily test
10	5	Thyroid hormones synthesis.	Hormones	Theoretical (3hours) + practical (2 hours)	Homework
11	5	Parathyroid hormones.	Hormones	Theoretical (3hours) + practical (2 hours)	daily exam
12	5	Adrenal cortex.	Hormones	Theoretical (3hours) +	Homework

				practical (2 hours)	
13	5	Adrenal medulla.	Hormones	Theoretical (3hours) + practical (2 hours)	daily exam
14	5	Nucleotides: Structure & function	Genetic Information	Theoretical (3hours) + practical (2 hours)	Homework
15	5	Nucleic acid: Structure & function	Genetic Information	Theoretical (3hours) + practical (2 hours)	
		Final-term exam.		Theoretical (3hours) + practical (2 hours)	Theoretical and practical exams (4 ^o +1 ^o)

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1-Schaum's outlines. General, Organic, and Biochemistry.2 nd ed. 2-Harper's illustrated Biochemistry. 28 th ed. 2009. Robert K. Murray, David A. Bender. 3-Biochemistry, Molecular biology &Genetics. 5 th ed.2010. Todd A. Swarson, Sandra I. Kim, Marc J. Glucksman.
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	