



Course specification

1-Basic information

Course Code:	BIC 1210
Course title :	Basic Biochemistry (2018-2019)
Academic year:	1 st academic Year
Program title:	B. Sc. Veterinary Medical sciences
Contact hours/ week	4 hours/week, (2 Lect./week, 2 Practical/week)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

- 1-Identify, acquire and distinguish the chemical composition of the body.
- 2- Recognize the role of vitamins, enzymes and hormones in biochemical reactions inside the animal cell and the diseases which may develop due to disturbance in these biochemical reactions.

3- Intended learning outcomes of course (ILOs)

a-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Recognize the structure of biological macromolecules inter in structures of the body.
- a2-Summerize the function and biochemical use of each substance enter in the structure of animal body.
- a3- Describe the role of vitamins in the vital processes of the living cell.
- a4- Describe the mechanisms of action of enzymes and how they regulate the biochemical reactions.
- a5- Illustrate the positive and negative feedback mechanisms of certain hormones to achieve the body balance.

b- Intellectual skills

By the end of this course the student should be able to:

- b1- Analyze the biochemical composition of different body organ and tissue which contributes its normal function.
- b2- Interpret the biochemical data and use it for useful evaluation of functions of different body tissues.
- b3- Discriminate the general biochemical mechanisms that culminate the functional disturbances of animal body.

c-Professional and practical skills

By the end of this course the student should be able to:



Course specification

- c1- assess normal body functions.
- C2- Identify the differences in structure and function of each chemical substance of the living cell.
- C3- perform different biochemical laboratory experiments.
- C4- Perform various biochemical tests for identifying unknown biochemical substances.

d-General and transferable skills

By the end of studying the course, the student should be able to:

- d1- Work in a group and manage time.
- d2- Exhibits the sense of beauty and neatness.
- d3- Utilize new technological tools.
- d4- Utilize efficiently library facilities and IT tools.

4-Topics and contents

Course	Topic	week	No. of hours	Lectures (2 hs/week)	Practical (2 hs/week)
1 st year – Second term – Basic Biochemistry – (Lec. 2h/ week, Pract. 2h/ week)	Chemistry of Carbohydrates	1,2,3	14	6	8
	Chemistry of lipids	4,5	8	4	4
	Chemistry of proteins	6,7	8	4	4
	Enzymes	8,9	8	4	4
	Vitamins	10,11	8	4	4
	Cell biology and Hormones	12,13	6	4	2
	Total		52	26	26

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows.
- 5.2- Self learning by preparing essays and presentations (computer researches and faculty library)
- 5.3- Practical (unknown samples).

6-Teaching and learning methods for the students with disabilities

Office hours and special meeting.

7-Student assessment



Course specification

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1, a2,a3,a4,a5	B1, b3		
Practical Exam		B2,b3	c1,c2,c3,c4	d1, d2,d3
Oral Exam	a1, a2,a3,a4,a5	b1,b2,b3		d2,d4

7.2. Assessment schedules/semester:

Method	Week(s)
Practical exams	15 th weak
Final exams	managed by administrations
Oral Exam	The same day of the final exam.

7.3. Weight of assessments:

Assessment	Weight of assessment
Practical exams	20%
Final exams	50%
Oral exams	20%
Student activity	10%
Total	100%

8- List of references

8.1. Notes and books

Departmental notes: none

8.2. Essential books:

- Hand Book of Biochemistry
- Practical Clinical chemistry

8.3. Recommended texts

- Haper's of Biochemistry.
- Biochemistry and clinical correlation.

8.4. Journals, Websitesetc

Journals: Biomedicine and pharmacotherapy, clinical chemistry and molecular biology

Websites: www.pubmed.com.

Course Coordinators

Head of Department



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Chemistry of Carbohydrates	1,2,3	1,2	1,2,3	1,2,3,4	1,2,3,4
Chemistry of proteins	4,5	1,2	1,2,3	1,2,3,4	1,2,3,4
Chemistry of lipids	6,7	1,2	1,2,3	1,2,3,4	1,2,3,4
Vitamins	8,9	3	1,2,3	1,2,3,4	1,2,3,4
Enzymes	10,11	4	1,2,3	1,2,3,4	1,2,3,4
Cell biology and Hormones	12,13	5	1,2,3	1,2,3,4	1,2,3,4

