



Course specification

1-Basic information

Course Code:	S1-HIST
Course title :	General and special Histology
Academic year:	First year
Program title:	B. Sc. Veterinary Medical sciences
Contact hours/ week	Lecture: 3hrs/week Practical: 3hrs/week
Approval Date	

2-Professional information

Overall aims of course:

- 1- Describe the normal microscopic structure of all body tissues and organs
- 2- Differentiate between the different body tissues and cells.
- 3- Identify special cellular and tissue constituents according to its staining affinity.
- 4- Specify cellular constituents and mention their role in the cell and the organs

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

1st semester

- a1- Classify the animal cells and tissues according to their shapes and functions.
- a2- Identify the structure and function of the different cells in the body as well as the tissues of different animal species.
- a3- Mention the cytoplasmic organelles and types of specialized tissues
- a4- describe the normal microscopic structure of animal cell and tissues.

2nd semester

- a1- Classify the animal body systems and organs.
- a2- Identify the structure and function of the different organs in different animal species.
- a3- Mention the types of specialized tissues in the animals organs
- a4- Illustrate the comparative microscopic structure of organs in different animal species.

b-Intellectual skills

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

1st semester

- b1- interpret the microscopic structure of all body cells and tissues
- b2-differentiate between the microscopic structure of some tissues in different animal species
- b3- correlate the relationship between the basic microscopic structure and functions of all body tissues

2nd semester



Course specification

- b1- Deal with the microscopic structure of all body organs.
- b2-Differentiate between the microscopic structure of body organs in different animal species
- b3- Discuss the relationship between the basic microscopic structure and functions of all body organs

C- Professional and practical skills

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

1st semester

- c1. Obtain histological specimen.
- c2. Use the light microscope to examine stained sections.
- c3. Practice the cells and tissue constituents according to their staining affinity.
- c4. Employ all the gained knowledge in histological practice in skillful pattern.

2nd semester

- c1. Obtain histological specimen.
- c2. Use the light microscope to examine stained sections.
- c3 Practice the organs constituents according to their staining affinity.
- c4. Employ all the gained knowledge in histological practice in skillful pattern.

d- General and transferable skills

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

1st and 2nd semesters

- d1. Work in groups and manage time
- d2. Communicate with their professors and staff members
- d.3. Utilize computer, microscope and internet for research work
- d4. Demonstrate the ability of problem definition and increase the ability of problem solving

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
First year-first semester General histology (Lec. 3 h./week, Pract.3 h./week)	Course description			
	Introduction and histological terminology *	3	3	
	Histological techniques	6		6
	- Cytology	9	6	3
	Epithelial tissue	9	3	6
- Connective tissue	18	9	9	



Course specification

	- Blood and hematopoietic tissue	6	3	3
	- Muscular tissue	6	3	3
	- Nervous tissue	6	3	3
	- Nervous system	6	3	3
	Immunity and Lymphatic tissue	9	6	3
	Total		39	39
First year-second semester Special histology (Lec. 3 h./week, Pract. 3h./week)	Cardiovascular system	6	3	3
	- Respiratory system	6	3	3
	- Urinary system	6	3	3
	- Male genital system	12	6	6
	- Female genital system	6	3	3
	- Digestive system	18	9	9
	- Endocrine system	12	6	6
	- Skin and mammary gland	6	3	3
	- Sense organs	6	3	3
	Total		39	39

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 and small group sessions (models, samples of stained tissues and data show).
- 5.4 Audiovisual (videos)

6-Teaching and learning methods for the students with disabilities

Office hours and special meeting

7-Student assessment

7.1. Assessments methods:

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



Course specification

7.2. Assessment schedules/semester:

Method	Week(s)
Practical exam	14 th week
written exam	15 th week
Oral Exam	managed by the department
student activities	along the semester

7.3. Weight of assessments/semester

Assessment	Weight of assessment
written exam	50%
Practical exam	30%
Oral Exam	20%
student activities	-----
total	100%

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of veterinary histology part I:-Prof.Dr.Khaled Mazher, Dr.Taghreed Nabil,Dr. Usama Kamal and Dr.Abdel-Razek Hashem. 2015/ I.S.B.N. 27221/2015
- Text book of veterinary histology part II:-Prof.Dr.Khaled Mazher, Dr.Taghreed Nabil,Dr. Usama Kamal and Dr.Abdel-Razek Hashem. 2015/ I.S.B.N. 27219/2015

8.2. Essential books:

- **Weather's Functional Histology (main reference book)**, a text and colour atlas. Fourth edition, by B.Young and J.W.Heath.

Cormack, D. H. (1987): Ham's Histology 9th Ed. J. B. Lippincott Company, Philadelphia, London, Mexico City, New York, St. Louis, Sao Paulo, Sydney

8.3. Recommended texts

- **Headlines of Veterinary Histology**. Hany E. S. Marei. 5th ed. 2006. V II.

8.4. Journals, Websitesetc

Journals:

- American Journal of anatomy



Beni-Suef University
Faculty of Veterinary Medicine

Course specification

- Anatomia Histologia Embryologia
- Anatomical record
- Egyptian journal of Histology

Websites:

WWW.Science direct

WWW. Pubmed.com

[WWW.Scholar](http://WWW.Scholar.google.com) google.com

Course Coordinators

Dr. Taghreed Mohamed Nabil

Head of Department

Prof.Dr/Khaled M. Mazher



Course specification

	Topics	Week	Intended learning outcomes of course (ILOs)			
			K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
	1st semester					
1	Introduction and histological terminology * Histological techniques	1 st	1,2,3,4	1,2,3	1,2,3,4	1,2,3,4
2	Cytology	2 nd and 3 rd	1,2,3,4	1,3	2,3,4	1,2,3,4
3	Epithelial tissue	4 th	1,2,4	1,2,3	2,3,4	1,2,3,4
4	Connective tissue	5 th and 6 th	1,2,4	1,2,3	2,3,4	1,2,3,4
5	Blood	7 th	1,2,4	1,2,3	2,3,4	1,2,3,4
6	Muscular tissue	8 th	1,2,4	1,2,3	2,3,4	1,2,3,4
7	Nervous tissue	9 th	1,2,4	1,2,3	2,3,4	1,2,3,4
8	Nervous system	10 th and 11 th	1,2,4	1,2,3	2,3,4	1,2,3,4
9	Lymphatic system	12 th and 13 th	1,2,4	1,2,3	2,3,4	1,2,3,4
	2nd semester					
10	Cardiovascular system	1 st	1,2,3,4	1,2,3	2,3,4	1,2,3,4
11	Respiratory system	2 nd	1,2,3,4	1,2,3	2,3,4	1,2,3,4
12	Urinary system	3 rd	1,2,3,4	1,2,3	2,3,4	1,2,3,4
13	Male genital system	4 th and 5 th	1,2,3,4	1,2,3	2,3,4	1,2,3,4
14	Female genital system	6 th	1,2,3,4	1,2,3	2,3,4	1,2,3,4
15	Digestive system	7 th , 8 th , 9 th	1,2,3,4	1,2,3	2,3,4	1,2,3,4
16	Endocrine system	10 th and 11 th	1,2,3,4	1,2,3	2,3,4	1,2,3,4
17	Skin and mammary gland	12 th	1,2,3,4	1,2,3	2,3,4	1,2,3,4
18	Sense organs	13 th	1,2,3,4	1,2,3	2,3,4	1,2,3,4
	Students activities		1,2,3,4	1,2,3	2,3,4	1,2,3,4



Beni Suef University
Faculty of Veterinary Medicine