

Specification for poultry and fish histology course 2019/2020

A-Affiliation

1.	Relevant program	Bachelor of Veterinary Medical Sciences (BVMSC)
2.	Department offering the course	Histology

Date of specification approval: ministerial decree No. 1727 on 26/4/2017
(Approved in this template by the department council on 1/10/2019)

B-Basic information

1.	Course title	Poultry and fish Histology
2.	Course code	208 (B) IV
3.	Level	2 nd year
4.	Semester	Second semester
5.	Total hours	4
6.	Lecture hours	2
7.	Practical hours	2

C-Professional Information

1- Course learning objectives

The course is providing the basic histological structure of different tissues and organs structure with Identification and differentiation between the different body organs as well as histological structure of poultry and fish.

2- Intended learning outcomes of the course (ILOs):

a- Knowledge and understanding

After successful completion of the course the students should be able to:

- a1- Identify the basic knowledge about special histology of endocrine, Urogenital and sense organs
- a2- Identify the basic knowledge about poultry and fish histology
- a3- Describe morphogenesis of endocrine, Urogenital and sense organs
- a4- Describe organ morphogenesis of poultry and fish
- a5- Identify the basic information about endocrine, Urogenital and sense organs
- a6- Identify the basic information about different poultry and fish organs

b- Intellectual skills

After successful completion of the course the students should be able to:

- b1- Distinguish different type of tissue organs and of poultry and fish
- b2- Differentiate between types of organs & tissues
- b3- Choose the suitable techniques for identification of different tissue organs
- b4- Judge the tissue organ identifications

c- Professional and practical skills

After successful completion of the course the students should be able to:

- c1- Prepare tissue organs for staining

- c2- Stain tissues organs with different stains
- c.3- Examine different tissue types
- c.4- Identify different class of tissue

d- General and transferable skills

After successful completion of the course the students should have the following skills

- d1- Team working skill
- d2- Research skill
- d3- Decision making skill

3- Course contribution in the program ILOs:

Course ILOS	Program ILOS
A Knowledge and understanding	a ³
B Intellectual skills	b ¹
C Professional and practical skills	c ¹
D General and transferable skills	d ^{1,6}

3.1- Course contents:

Topic	Lecture hours	Practical hours
Endocrine system of poultry	4	4
Urogenital organs poultry	4	4
Sense organs of fish and poultry	4	4
Digestive system (Poultry and poultry and fish)	4	4
Respiratory system (Poultry and poultry and fish)	4	4
Urinary system (of fish)	2	4
Male and female Genital system of fish)	2	4
Endocrine system (of fish)	2	4
Lymphatic system (Poultry and poultry and fish)	2	2
Feather and Skin	2	2
Total hours	30	30

The midterm and practical exams are included during the semester

3.2- ILOs matrix:

Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
Endocrine system	a1, a3, a5	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Urogenital system	a1, a3, a5	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Sense organ	a1, a3, a5	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Digestive system	a2, a4, a6	b1, b2, b3,	c1, c2, c3, c4	d1 to d3

(Poultry and poultry and fish)		b4		
Respiratory system (Poultry and poultry and fish)	a2, a4, a6	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Urinary system (Poultry and poultry and fish)	a2, a4, a6	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Male and female Genital (Poultry and poultry and fish)	a2, a4, a6	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Endocrine system (Poultry and poultry and fish)	a2, a4, a6	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Lymphatic system (Poultry and poultry and fish)	a2, a4, a6	b1, b2, b3, b4	c1, c2, c3, c4	d1 to d3
Feather and Skin	a1, a2, a3	b1, b2, b3	c1, c2, c3, c4	d1 to d3

4- Teaching and learning and assessment methods:

ILOs	Teaching and Learning method						assessment method					
	L	P&M	D&S	P	Ps	Bs	semester	midterm	oral	practical	written	
Knowledge and understanding	a1	x	x	x	x	0	x	x	x	x	0	x
	a2	x	x	x	x	0	x	x	x	x	0	x
	a3	x	x	x	x	0	x	x	x	x	0	x
	a4	x	x	x	x	0	x	x	x	x	0	x
	a5	x	x	x	x	0	x	x	x	x	0	x
	a6	x	x	x	x	0	x	x	x	x	0	x
Intellectual skills	b1	x	x	x	x	x	x	x	x	x	0	x
	b2	x	x	x	x	x	x	x	x	x	0	x
	b3	x	x	x	x	x	x	0	x	x	0	x
	b4	x	x	x	x	x	x	x	0	x	0	x
Practical skills	c1	0	x	0	x	x	0	x	0	x	x	0
	c2	0	x	0	x	x	0	x	0	x	x	0
	c3	0	x	0	x	x	0	x	0	x	x	0
	c4	0	x	0	x	x	0	x	0	x	x	0
General skills	d1	x	x	0	x	x	0	x	0	x	0	0
	d2	0	x	x	0	0	x	x	0	x	0	x
	d3	x	0	x	x	x	x	x	0	x	x	0

L :Lecture, P&M: Presentations & Movies, D&S: Discussions & Seminars P: Practical Ps: Problem solving, Bs: Brain storming

5- Assessment timing and grading:

Assessment method	timing	grade
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Mid-term exam and semester work	6 th week	15
Practical exam	14 th week	20
oral exam	End of semester	15
Written exam	End of semester	50
total		100

6- List of references

6.1- Course notes:

Fundamental veterinary histology, Edited by Staff members

Essential Laboratory Histology, Edit by Staff members

6.2- Essential books (textbooks)

- **D. F. Paulsen (2010)** histology and cell biology
- **D. A. Samuelson (2007)** Veterinary Histology
- **Eroschenko, V. P. (2005):** difiore's Atlas of histology. 10th Ed. Philadelphia Baltimore New York London Buenos Aires Hong Kong Sydney Tokyo
- **Junqueira, L. C. and Carneiro J. (2003):** Basic histology. Tenth Edition. McGraw-Hill. New York Chicago San Francisco Lisbon London Madrid Mexico city New Delhi San Juan Seoul Singapore Sydney Toronto

6.3- Recommended books

- Course note.
- **D. A. Samuelson (2007)** Veterinary Histology
- **Drury R. A. B. and Wallington E. A. (1980):-** Carleton's Histological technique. 4th ED., Oxford Unvi., Press. London, New York, Toronto.

6.4- Periodicals, Web sites, . . . etc

- Journal of Anatomy.
- Journal of Cell Ultrastructure
- Cell tissue Research
- Anatomia Histologia Embryologia
- www.ekb.eg
- <http://www.drihab1.com>
- <http://www.vt.com>

7- Facilities required for teaching and learning

- Data show/White board
- Histology Laboratory.
- Tissue processing & staining
- Central laboratory

Course coordinator: Prof. Dr. Ihab Mahmoud Abd El-Aal EL-Zoghby

Head of department Prof. Dr. Ihab Mahmoud Abd El-Aal EL-Zoghby

Signature **Date 1/10/2019**