



Beni-Suef University
Faculty of Veterinary Medicine
Pathology department
Course specification



1-Basic information

Course Code:	S4-PATH
Course title :	Pathology of animal diseases
Academic year:	4 th Academic Year, 1 st and 2 nd semester, 2017/2018
Program title:	B. Sc. Veterinary Medical sciences
Contact hours/ week	4 hours/week, (2 Lect./week, 2 Practical/week)
Approval Date	../9/2017

2-Professional information

Overall aims of course:

This course aims to:

- 1- How to perform post- mortem examination, reporting and good sampling.
- 2- Building up general knowldgmt about mechanisms by which diseases developed, progressed and squealed.
- 3- Correlate between the macroscopic & microscopic morphological alterations and suspected infectious diseases of domestic animals and poultry (1st, 2nd semester).
- 4- Acquire the practices necessary for identifying the causes of the pathological alterations either occurred in gonads or diseased animal by specific infectious agent.
- 5- Correlate between specific alterations with definite cause.

3- Intended learning outcomes of course (ILOs)

a-Knowledge and understanding:

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

- a1 - Recall his information about the post- mortem examination and reporting.
- a2 - Outline the gross and microscopic lesions of viral, bacterial and parasitic diseases of the domestic animals and poultry.
- a3- Describe mechanisms of pathological alterations due to different biological causes (viral, bacterial and parasitic).

b-Intellectual skills

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

- b1. Discriminate the characteristic anatomical and histopathologic changes of viral, bacterial and parasitic and diseases.
- b2. Grouping viral, bacterial, and parasitic diseases according to animal species and target tissue/organ.



Beni-Suef University
Faculty of Veterinary Medicine
Pathology department
Course specification



- b3. Differentiate between tissue/organ appearance in healthy and diseased domestic animals.
- b4. Interpret the post mortem and microscopic lesions in tissues of diseased animals.
- b5. Diagnose differentially between diseases of domestic animals on pathological bases.

c-Professional and practical skills

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

- c1- Select and prepare appropriate necropsy samples.
- c2- Perform histopathologic diagnosis of the prepared specimens using light microscope.
- c3- Perform post mortum examination.
- c4- Prepare professional pathological reports.

d-General and transferable skills

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

- d1- Demonstrate teamwork and communication skills.
- d2- Utilize computer and internet skills.
- d3- Utilize the internet skills on the electronic pathological courses.

4-Topics and contents

Course	Topic	No. of hours	Lectures	Week (s)	Practical
Title (Lec. 2 h./week, Pract. 2h./week)	First semester				
	Pathology of male genital system	5	3	1 st 2 nd	2
	Pathology of female genital system	5	3	2 nd 3 rd	2
	FMD, VS, and BPS	4	2	4 th	2



Beni-Suef University
Faculty of Veterinary Medicine
Pathology department
Course specification



	CP, BVD and MD	4	2	5 th	2
	MCF, , IBR, PI3, and Ephemeral fever	5	3	6 th 7 th	2
	RVF, BT, Leucosis, COE	5	3	7 th 8 th	2
	Pox, LSD, and Papillomatosis	4	2	9 th	2
	TSE	4	2	10 th	2
	AHS, Equine encephalomyelitis, EI, EA	4	2	11 th	2
	Canine distemper and Rabies	4	2	12 th	2
	Student's activities (Collect pathology specimens, Preparing pathology assays from the library and Sharing in department pathology rounds).	2	2	13 th	--
	Total	46	26		20

Course	Topic	No. of hours	Lectures	Practical	
Title (Lec. 2h./week, Pract. 2h./week)	Second semester Pathology of bacterial diseases				
	Tuberculosis	4	2	1 st	2
	Paratuberculosis, Pseudotuberculosis, Actinomycosis, and Actinobacillosis	5	3	2 nd 3 rd	2
	Colibacillosis, Paratyphoid, Navel ill and Calf Diphtheria	5	3	3 rd 4 th	2
	Black leg, black dis, enterotoxaemia, and Pulpy kidney	4	2	5 th	2
	Bacillary hemoglobin urea , and malignant edema	4	2	6 th	2
	Anthrax, Hemorrhagic septicemia , and Contagious Bovine Pleuropneumonia, Oedematous skin disease	5	3	7 th 8 th	2



Beni-Suef University
Faculty of Veterinary Medicine
Pathology department
Course specification



	Brucellosis, Vibriosis , Leptospirosis, and Listeriosis	5	3	8 th 9 th	2
	Glanders, Strangles, and Ulcerative lymphangitis and Epizootic lymphangitis	4	2	10 th	2
	Parasitic diseases	4	2	11 th	2
	Postmortem examination and reporting	4	2	12 th	2
	Student's activities (Collect pathology specimens, Preparing pathology assays from the library and Sharing in department pathology rounds).	2	2	13 th	-----
	Total	46	26		20

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) and using e-learning web site: <http://cms.nelc.edu.eg>
- 5.3- Practical (models, samples of dead necropsied animals and monitoring of pathological lesions grossly then examination microscopically).

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	b1, b2,b3,b5	-----	d2
Practical Exam	-----	b1,b2 and b3	c1,c2,c3,c4	d2
Oral Exam	a1,a2,a3	b2,b4,b5	-----	d1



Beni-Suef University
Faculty of Veterinary Medicine
Pathology department
Course specification



7.2. Assessment schedules/ semester:

Method	Week(s)
Practical exams	Last 14 th week in semester
Written exams	Last 15 th week in semester
Oral Exam	Last 15 th week in semester
Student activities	During semester

7.3. Weight of assessments/ semester:

Assessment	Weight of assessment
Practical exams	(15) 30%
Oral exams	(10) 20%
Written exams	(25) 50%
Student activities	-----
Total	(50) 100%

8- List of references

8.1. Notes and books:

Departmental notes on: Theoretical and practical course notes on Systemic Pathology
Theoretical and practical course notes on Pathology of viral diseases
Theoretical and practical course notes on Pathology of bacterial diseases
Text book of Animal diseases

By staff members of Pathology, Fac. Vet. Med., Beni-Suef University

8.2. Essential books:

- Jubb, K.V., P.C. Kennedy and N. Palmer (2007) 5th ed. Pathology of domestic animals. Saunders, Elsevier, Philadelphia. **(Present in the library of the faculty)**
- Jones, T. C., Hunt, Ronald D., and King, Norval W. (1996) 6th ed. Veterinary Pathology. Academic press, N. Y. USA. **(Present in the library of the faculty)**
- Maxie, G., 2005. Pathology of Domestic Animals. 5th Ed., Mosby Elsevier, USA.
- Gyles, C.L., 2004. Pathogenesis of Bacterial Infections in Animals. 3rd Ed., Blackwell Publ., USA.

8.3. Recommended texts:



Beni-Suef University
Faculty of Veterinary Medicine
Pathology department
Course specification



- Cheville, N.F., 2006. Introduction to Veterinary Pathology. 3rd Ed., Blackwell Publishing.
- McGavin, M.D., 2007. Pathologic Basis of Veterinary Disease. 5th Ed., Mosby Elsevier, USA.
- Dijk, J.V., Gruys, E. and Mouwen, J., 2006. Color Atlas of Veterinary Pathology. 2nd Ed., Saunders Ltd.

8.4. Journals, Websitesetc

Journals:

- * Egyptian Journal of Comparative Pathology and Clinical Pathology.
- * Veterinary Pathology.
- * Journal of Comparative Pathology.
- * Pathologia Veterinaria.
- * American Journal of Pathology.
- * Journal of Pathology and Bacteriology.
- * Archive of Pathology.
- * Veterinary Record.
- * Canadian Journal of comparative Medicine.
- * American Journal of veterinary research.
- * Research on veterinary Science.

Websites:

- * <http://cms.nelc.edu.eg>
- * www.hisopathologicallab.com
- * Home Page : International Veterinary Information Service (IVIS): <http://www.ivis.org/home.asp>
- * NetVet Veterinary Resources , Veterinary Specialties: <http://netvet.wustl.edu/vspecial>
- * Veterinary Infectious Diseases:
<http://www.campusexplorer.com/colleges/major/5FFE3D6F/Veterinary-Medicine/BE7077CB/Veterinary-Infectious-Diseases-Cert-MS-PhD/>

Course Coordinators

Dr. Nesreen Mohamed Safwat

Head of Department

Prof. Dr. Khalid Ali



Course specification

	Topic	Week	Intended learning outcomes of course (ILOs)			
			K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
First semester	Pathology of Male genital system	1 st 2 nd	1, 2, 3	1,2 , 3, 4,5	2	1,3
	Pathology of Female genital system	2 nd 3 rd	1, 2, 3	1,2 , 3, 4,5	2	1,3
	FMD, BPS, and VS	4 th	1, 2, 3	1,2 , 3, 4,5	2	1,2,3
	CP, BVD and MD	5 th	1, 2, 3	1,2 , 3, 4,5	2	1,3
	MCF, , IBR, PI3, and Ephemeral fever	6 th 7 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,3
	RVF, BT, Leucosis, COE	7 th 8 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,2
	Pox, LSD, and Papillomatosis	9 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,3
	TSE	10 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,3
	AHS, Equine encephalomyelitis, EI, EA	11 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,3
	Canine distemper and Rabies	12 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,3
	Student's activities (Collect pathology specimens, Preparing pathology assays from the library and Sharing in department pathology rounds).	13 th	1, 2, 3	1,2 , 3, 4,5	1, 2	1,3
Second	Tuberculosis	1 st	1, 2, 3	1, 3, 4	1, 2	1,3
	Paratuberculosis, Pseudotuberculosis, Actinomycosis, and Actinobacillosis	2 nd	1, 2, 3	1,2,3,4	1,2	1,2,3



Course specification

	3 rd				
Colibacillosis, Paratyphoid, Navel ill and Calf Diphtheria	3 rd 4 th	1, 2, 3	1,2,3,4	1,2,3	1,3
Black leg, black dis, enterotoxaemia, and Pulpy kidney	5 th	1, 2, 3	1,2,3,4	1,3	1,3
Bacillary hemoglobin urea , and malignant edema	6 th	1, 2, 3	1,2,3,4	1,2,3	1,2,3
Anthrax, Hemorrhagic septicemia , and Contagious Bovine Pleuropneumonia, Oedematous skin disease	7 th 8 th	1, 2, 3	1,2,3,4	1,2, 3,	1,2,3
Brucellosis, Vibriosis , Leptospirosis, and Listeriosis	8 th 9 th	1, 2, 3	1,2 , 3, 4,5	2	2,3
Glanders, Strangles, and Ulcerative lymphangitis and Epizootic lymphangitis	10 th	1, 2, 3	1,2 , 3, 4,5	1,2	1,3
Parasitic diseases	11 th	1, 2, 3	1,2 , 3, 4,5	2	1,3
Postmortem examination and reporting	12 th	1, 2, 3	1,2 , 3, 4,5	2	1,2,3
Student's activities (Collect pathology specimens, Preparing pathology assays from the library and Sharing in department pathology rounds).	13 th	1, 2, 3	1,2 , 3, 4,5	1,3	1,2,3

