

## Specification for Pathology C course

2025/2026

### 1-Basic information

1.	Course title	Pathology (C)							
2.	Course code	PAT.416							
3.	Department offering the course	Pathology							
3.	Level	4 <sup>th</sup> year							
4.	Semester	Fall							
5.	Number of units/credit hours	Theoretical	1	Practical	1(2)	Other	0	Total	2(3)
6.	Course Type	√ <b>Obligatory</b> <b>Elective</b>							
7.	Academic program	Bachelor of Veterinary Medicine (BVM)							
8.	University	Benha University							
9.	Faculty	Veterinary medicine							
10.	Name of course coordinator	Prof. Dr. Abdelbaset I. El-Mashad							
11.	Date of Approval	Department council on 8/7/2025							
12.	Date of Approval	Faculty council on 27/8/2025							

### 2-Course overview

- **Course contents written in the program bylaw:**

Study pathology of disease affecting different body system in case of different microbial , viral , mycotic and parasitic diseases.

### 3- Intended learning outcomes of the course (ILOs):

	NARS ILOS		Course ILOS	
	Code	Text	Code	Text
<b>Knowledge and understanding</b>	<b>2.7</b>	Various causes of animal diseases, their pathogenesis, macro- and micro-scopic pathological lesions, and laboratory diagnosis	<b>a1</b>	Define and identify different pathological lesions associated with bacterial and parasitic diseases affected various animal, poultry and fish species
			<b>a2</b>	Identify the Pathogenesis of bacterial and parasitic diseases affected various animal, poultry and fish species.
			<b>a3</b>	Describe the postmortem and microscopic lesions associated with bacterial and parasitic diseases affected various animal, poultry and fish species.

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			a4	Mention the significance and fate of different lesions
<b>Intellectual skills</b>	<b>4.4</b>	Proficiently secure diagnostic reasoning, develop problem lists and differential diagnosis in order to deductively and critically reach the most appropriate solution (s) and management of the addressed clinical problems.	<b>b1</b>	Differentiate between various lesions associated with bacterial and parasitic diseases affected various animal, poultry and fish species .
			<b>b2</b>	Link between the cause and pathological lesion associated with bacterial and parasitic diseases affected various animal, poultry and fish species.
			<b>b3</b>	Interpret the most important pathological changes in cells and tissues of the body
			<b>b4</b>	Correlate between macroscopic and microscopic lesion
<b>Professional and practical skills</b>	<b>3.4</b>	Perform clinical examination of diseased cases and collect relevant samples	<b>c1</b>	Collect and Prepare the tissue specimens for histopathological examination.
			<b>c2</b>	Apply routine and special staining techniques of tissue sections
			<b>c3</b>	Examine macroscopic and microscopic changes
			<b>c4</b>	Write a report about pathological lesions associated with bacterial and parasitic diseases affected various animal, poultry and fish species
	<b>3.5</b>	Appropriately select and interpret findings of the common clinical and laboratory diagnostic procedures to reach and adopt the most convenient therapeutic and management approach.	<b>c1</b>	Collect and Prepare the tissue specimens for histopathological examination.
			<b>c2</b>	Apply routine and special staining techniques of tissue sections
<b>General and transferable skills</b>	<b>5.1</b>	Work under pressure and / or contradictory conditions	<b>d1</b>	Work under pressure during pathology lab sessions.
	<b>5.2</b>	Function in a multidisciplinary team	<b>d2</b>	Work in a team during the diagnosis process.
	<b>5.3</b>	Communicate appropriately verbally and nonverbally	<b>d3</b>	Communicate & Cooperate with other colleagues for reaching diagnosis.
	<b>5.5</b>	Search for new information and technology as well as adopt life-long self learning	<b>d4</b>	Search for new information in the field of pathology.

		ethics		
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4- Teaching and learning methods					
Lectures	√	Discussion & seminar (self-learning)	√	Practical	√
Presentation & movies	√	Problem solving	√	Brain storming	√
Others					

**- Course contents:**

Number of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours	Expected number of the Learning Hours			
			Theoretical teaching (lectures/discussion groups/.....)	Training (Practical/Clinical / .....)	Self-learning (Tasks/ Assignments/ Projects/ ...)	Other (to be determined)
W1	Pathology of bacterial diseases of farm animals1	2(3)	1	1(2)		0
W2	Pathology of bacterial diseases of farm animals2	2(3)	1	1(2)		0
W3	Pathology of bacterial diseases of farm animals3	2(3)	1	1(2)	Formative quiz(self-learning)	0
W4	Pathology of bacterial diseases of equines1	2(3)	1	1(2)		0
W5	Pathology of bacterial diseases of equines2	2(3)	1	1(2)		0
W6	Pathology of bacterial diseases of poultry	2(3)	1	1(2)	Formative quiz(self-learning)	0
W7	Semester works (one hour exam)					
W8	Pathology of bacterial diseases of pets	2(3)	1	1(2)		0
W9	Pathology of bacterial diseases of fish	2(3)	2	1(2)		0
W10	Pathology of parasitic diseases of farm animals	2(3)	1	1(2)	Formative quiz(self-learning)	0

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<b>W11</b>	Pathology of parasitic diseases of equines	<b>2(3)</b>	<b>1</b>	<b>1(2)</b>		<b>0</b>
<b>W12</b>	Pathology of parasitic diseases of poultry	<b>2(3)</b>	<b>1</b>	<b>1(2)</b>		<b>0</b>
<b>W13</b>	Pathology of parasitic diseases of pets	<b>2(3)</b>	<b>1</b>	<b>1(2)</b>	<b>Formative quiz(self-learning)</b>	<b>0</b>
<b>W14</b>	Pathology of parasitic diseases of fish	<b>2(3)</b>	<b>1</b>	<b>1(2)</b>		<b>0</b>
<b>W15</b>	<b>Practical exam</b>					

## 5- Assessment timing and grading:

### a- Assessment methods (summative and formative)

1. **Formative assessment:** including (weekly quizzes, homework assignments and surveys).
2. **Summative assessment** including (quizzes, class activates, Mid-term exam, practical exam, oral exams and final written exams).

### b- Assessment schedule and weight

Assessment method	Assessment Timing (Week Number)	Marks/ Scores	Percent
Semester works including one hour exam	7 <sup>th</sup> week	10	10%
Assignments / Project /Portfolio/ Logbook	Throughout semester		
Field training			
Formative assessment	Throughout semester	-	-
Practical exam	15 <sup>th</sup> week	30	30%
oral exam	End of semester	10	10%
Written exam	End of semester	50	50%
Total		100	100%

## 6- Learning resources and supportive facilities:

	<b>Main reference</b>	<b>Student handbook:</b> Specific Veterinary Pathology "Bacterial and Parasitic diseases" and Practical histopathology Edit by Staff members
	<b>Essential books</b>	1-J.L.Vegad (2017) A text book of veterinary

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<b>Learning resources</b>	<b>(text books)</b>	special pathology. 2-James R. Rooney (2015) Equine pathology
	<b>Recommended books</b>	Course note. <ul style="list-style-type: none"> <li>• J.L.Vegad (2017) A text book of veterinary special pathology.</li> <li>• Genti A. Sastry (2010) veterinary pathology</li> <li>• J.E.Van Dijk (2007) Color Atlas Of veterinary pathology</li> </ul>
	<b>Periodicals, Web sites, . . . etc</b>	<ul style="list-style-type: none"> <li>• Veterinary Pathology.</li> <li>• www.IVIS.org.</li> <li>• www.ekb.eg</li> </ul>
	<b>Learning platform</b>	Thinqi
<b>Supportive facilities</b>	<b>Devices &amp; instruments</b>	<b>Devices:</b> <ul style="list-style-type: none"> <li>• Microtome</li> </ul> <b>Instruments:</b> <ul style="list-style-type: none"> <li>• The blackboard</li> <li>• Colored drawing pens</li> <li>• The data show</li> <li>• Microscopes</li> <li>• Colored photographic images</li> <li>• Visual aids for various diseases</li> <li>• Dissection tools for dead animals and birds</li> <li>• Deep freezer for preserving samples</li> </ul>

### Matrices:

#### **A- Content and ILOs matrix:**

Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
Pathology of bacterial diseases of farm animals	a1, a2, a3, a4	b1, b2, b3, b4	c1, c2, c3, c4	d1, d2, d3, d4
Pathology of bacterial diseases of equines	a1, a2, a3	b1, b2, b4	c1, c2, c3	d1, d2, d3, d4
Pathology of bacterial diseases of poultry	a1, a2, a4	b1, b3, b4	c1, c2, c4	d1, d2, d3, d4
Pathology of bacterial diseases of pets	a1, a2, a4	b1, b3, b4	c1, c3, c4	d1, d2, d3, d4
Pathology of bacterial diseases of fish	a1, a2, a3	b1, b2, b3,	c1, c2, c4	d1, d2, d3, d4

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Pathology of parasitic diseases of farm animals	a1, a2, a3	b1, b2, b3, b4	c1, c2, c3, c4	d1, d2, d3, d4
Pathology of parasitic diseases of equines	a1, a2, a4	b1, b3, b4	c1, c2, c4	d1, d2, d4
Pathology of parasitic diseases of poultry	a1, a2, a4	b1, b2, b3,	c1, c2, c3	d1, d2, d4, d5
Pathology of parasitic diseases of pets	a1, a2, a4	b1, b2, b4	c1, c2, c4	d1, d2, d3, d4
Pathology of parasitic diseases of fish	a1, a2, a 3	b1, b2, b3,	c1, c2	d1, d2, d3, d4

### B- Teaching and learning methods and ILOs matrix:

ILOs		Teaching and Learning methods					
		L	P&M	D	P	Ps	Bs
Knowledge and understanding	a1	√	√	√			√
	a2	√	√	√			√
	a3	√	√	√			√
	a4	√	√	√			√
Intellectual skills	b1	√	√	√		√	√
	b2	√	√	√		√	√
	b3	√	√	√		√	√
	b4	√	√	√		√	√
Professional and practical skills	c1		√	√	√	√	
	c2		√	√	√	√	
	c3		√	√	√	√	
	c4		√	√	√	√	
General skills	d1	√		√		√	√
	d2				√		
	d3		√				
	d4				√		

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

### C- Assessment methods and ILOs matrix:

ILOs		Assessment method				
		Formative assessment	Semester works (one hour exam)	Oral	Practical	Written
Knowledge and understanding	a1	√	√	√		√
	a2	√	√	√		√
	a3	√	√	√		√
	a4	√	√	√		√
Intellectual skills	b1	√	√	√		√
	b2	√	√	√		√
	b3	√	√	√		√
	b4	√	√	√		√
Professional and practical	c1				√	
	c2				√	

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skills	c3				√	
	c4				√	
General skills	d1	√	√			
	d2	√	√			
	d3	√	√	√		
	d4	√	√			

Name and Signature  
Course Coordinator

Prof. dr. AbdElbasetI. El-Mashad

Name and Signature  
Program Coordinator

Prof. Dr. Mahmoud Abouelroos