



## Course Specification of Special Pathology

I. Course Identification and General Information:					
1	<b>Course Title:</b>	Special Pathology			
2	<b>Course Number &amp; Code:</b>	PA723			
3	<b>Credit hours:</b>	C.H			
		Theoretical	Practical	Training	Seminar
		3	1	0	0
4	<b>Study level/ semester at which this course is offered:</b>	Second Semester- Third Year			
5	<b>Pre –requisite (if any):</b>	PA723			
6	<b>Co –requisite (if any):</b>				
7	<b>Program (s) in which the course is offered:</b>	Veterinary Medicine			
8	<b>Language of teaching the course:</b>	English			
9	<b>Location of teaching the course:</b>	Faculty of Veterinary Medicine Building			
10	<b>Prepared by:</b>	Dr. Hussein Abdulhadi Nasser Al-Wadei			
11	<b>Date of approval:</b>				

### II. Course description:

The Veterinary Pathology course begins with an introduction to the subject with their basics involved and the causes of diseases. Then the course deals with how these causes induce various forms of injuries to the structural and functional unit of the organism, the cell, even leading to the death of the cell(s) or the organism. During the course, you will be taught how the animal responds to such injuries (inflammation, chemical mediators, systemic effects, clinical manifestations) and recovers from the same ( Healing, growth factors, cell cycle) and different hemodynamic changes occurring during disease processes. Also, the fundamentals of disease processes have to be understood before proceeding to the proper subject of systemic and specific pathology.

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**III. Intended learning outcomes (ILOs) of the course:**

**(A) Knowledge and Understanding:**

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **Knowledge and Understanding.**

Program Intended Learning Outcomes (Sub-PILOs) in: Knowledge and Understanding		Course Intended Learning Outcomes (CILOs) in: Knowledge and Understanding	
After completing this program, students will be able to:		After completing this course, students will be able to:	
<b>A1-</b>	Demonstrate a sound knowledge and understanding of concepts and principles of general culture, basic science, and that support veterinary medicine.	<b>a1-</b>	Explain the occurrence, development and progression of [BASIC/COMMON] pathological changes in body systems and individual organs, and to relate their morphology at gross (macroscopic) and microscopic levels to clinically recognizable functional defects and disease states.
<b>A4-</b>	Describes the foundations and procedural steps for treating all diseases that affect different animals, highlighting the medical conditions that need surgical interventions.	<b>a2-</b>	Make clear of appropriate means of sample collection and handling and the basic interpretation of hematology, clinical biochemistry and cytology investigations

**Teaching And Assessment Methods For Achieving Learning Outcomes:**

Alignment of Learning Outcomes of Knowledge and Understanding to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Knowledge and Understanding		Teaching strategies/methods to be used	Methods of assessment
completing this course, students will be able to:		<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Dialogue and discussion</li> <li>• Practical application (Labs)</li> <li>• Scientific trips</li> <li>• Field and clinical training</li> </ul>	-The written test (Monthly, Midterm, Final) -Short tests (Quizzes) - Oral tests - Practical tests (Lab Test)
<b>a1-</b>	Explain the occurrence, development and progression of [BASIC/COMMON] pathological changes in body systems and individual organs, and to relate their morphology at gross (macroscopic) and microscopic levels to clinically recognizable functional defects and disease		

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	states.	<ul style="list-style-type: none"> <li>• Simulation and demos</li> <li>• Brainstorming</li> <li>• Self education</li> </ul>	<ul style="list-style-type: none"> <li>- Evaluation of reports</li> <li>- Assignments (Homeworks)</li> <li>- Projects</li> <li>- Presentations</li> </ul>
a2-	Make clear of appropriate means of sample collection and handling and the basic interpretation of hematology, clinical biochemistry and cytology investigations		

<b>(B) Intellectual Skills:</b>			
<b>Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Intellectual skills</b>			
<b>Program Intended Learning Outcomes (Sub-PILOs) in Intellectual skills</b>		<b>Course Intended Learning Outcomes (CILOs) of Intellectual Skills</b>	
<b>After completing this program, students will be able to:</b>		<b>After completing this course, students will be able to:</b>	
<b>B2-</b>	Predicts an appropriate medical diagnosis for the most common disease states through analysis of clinical story data and the results of medical examinations of a sick animal.	<b>b1-</b>	Interpret macroscopic lesions in such a way as to make a meaningful diagnostic assessment in relation to clinical observations
<b>B3-</b>	Design appropriate nursing and treatment care plans for different diseases that affect animals, prioritizing treatment.	<b>b2-</b>	Explain how animals normal functions changes and how healing processes works during diseases
<b>Teaching And Assessment Methods For Achieving Learning Outcomes:</b>			
<b>Alignment of Learning Outcomes of Intellectual Skills to Teaching Methods and Assessment Methods:</b>			
<b>Course Intended Learning Outcomes (CILOs) in Intellectual Skills.</b>		<b>Teaching strategies/methods to be used</b>	<b>Methods of assessment</b>
<b>After completing this course, students will be able to:</b>			
<b>b1-</b>	Interpret macroscopic lesions in such a way as to make a meaningful diagnostic assessment in relation to clinical observations	<ul style="list-style-type: none"> <li>• Dialogue and discussion</li> <li>• Lectures</li> <li>• Practical application (Labs)</li> <li>• Problem Solving</li> <li>• Cooperative</li> </ul>	<ul style="list-style-type: none"> <li>▪ The written test</li> <li>▪ Oral tests</li> <li>▪ Practical tests</li> <li>▪ Note the performance</li> <li>▪ Achievement file (Accomplishments)</li> </ul>
<b>b2-</b>	Explain how animals normal functions		

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	<p>changes and how healing processes works during diseases</p>	<p>learning and working groups</p> <ul style="list-style-type: none"> <li>• Scientific trips</li> <li>• Field and clinical training</li> <li>• Simulation and demos</li> <li>• Research costs and projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Evaluation of reports</li> <li>▪ Evaluating student presentations</li> </ul>
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**(C) Professional and Practical Skills:**

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **Professional and Practical Skills**

Program Intended Learning Outcomes (Sub-PILOs) in Professional and Practical Skills		Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills	
After completing this program, students will be able to:		After completing this course, students will be able to:	
C1-	Accurately records a comprehensive pathological story of a sick animal including information on healthy behavior and the necessary checks.	c1-	Connect the results of clinical and laboratory evaluation of diseased animals to the underlining pathological mechanisms
C3-	Reads the results of laboratory investigations and diagnostic scans and writes reports and prescriptions for all common cases in a proper way.	c2-	Elaborate on how the dissolution of tissues and cells occur and on the difference between necrosis and apoptosis.

**Teaching And Assessment Methods For Achieving Learning Outcomes:**

Alignment of Learning Outcomes of Professional and Practical Skills to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills	Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:	<ul style="list-style-type: none"> <li>• Practical</li> </ul>	<ul style="list-style-type: none"> <li>▪ Practical tests</li> </ul>

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c1-	Connect the results of clinical and laboratory evaluation of diseased animals to the underlining pathological mechanisms	application (Labs) <ul style="list-style-type: none"> <li>• Problem Solving</li> <li>• Cooperative learning and working groups</li> <li>• Scientific trips</li> <li>• Case Study</li> <li>• Field and clinical training</li> <li>• Simulation and practical presentations</li> <li>• Research costs and projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Note the performance</li> <li>▪ The written test</li> <li>▪ Oral tests</li> <li>▪ Achievement file</li> <li>▪ Evaluation of reports</li> <li>▪ Evaluating student presentations</li> </ul>
c2-	Elaborate on how the dissolution of tissues and cells occur and on the difference between necrosis and apoptosis.		

**(D) General / Transferable Skills:**

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **General and Transferable skills**

Program Intended Learning Outcomes (PILOs) in General / Transferable skills		Course Intended Learning Outcomes (CILOs) in General / Transferable skills	
<b>After completing this program, students will be able to:</b>		<b>After completing this course, students will be able to:</b>	
D2-	Develops his scientific, professional, research capabilities on his own, and follows what is emerging in his field of specialization, including computer applications and information and communication technology.	d1-	Familiar with the tissue samples being sent to veterinary pathology laboratories and is knowledgeable on how to take samples for various laboratories during necropsy.
D3-	Practicing problem-solving, negotiation, supervision and veterinary medical management skills as well as writing research reports	d2-	Describe the reasons and contributing factors to certain anomalies that frequently occur in domestic animals.

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efficiently and professionally.

**Teaching And Assessment Methods For Achieving Learning Outcomes:**

**Alignment of Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:**

Course Intended Learning Outcomes (CILOs) in General and Transferable Skills		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		<ul style="list-style-type: none"> <li>• Dialogue and discussion</li> <li>• Cooperative learning and working groups</li> <li>• Scientific trips</li> <li>• Research costs and projects</li> <li>• Self-education</li> <li>• Demo and practical presentations</li> <li>• Problem Solving</li> </ul>	<ul style="list-style-type: none"> <li>▪ Achievement file</li> <li>▪ Evaluation of reports</li> <li>▪ Evaluating student presentations.</li> <li>▪ Note the performance.</li> <li>▪ Practical tests. (Lab Test)</li> </ul>
d1-	Familiar with the tissue samples being sent to veterinary pathology laboratories and is knowledgeable on how to take samples for various laboratories during necropsy.		
d2-	Describe the reasons and contributing factors to certain anomalies that frequently occur in domestic animals.		

**IV. Course Content:**

**1 – Course Topics/Items:**

**a – Theoretical Aspect**

Order	Topic List / Units	CILOs (symbols)	Sub-topic List	Number of weeks	Contact hours
1	a. Reading Syllabus and Knowing each other b. Cardiovascular System	b1, b2	Pericardium, traumatic pericarditis, reticulitis	1	3
2	Heart Water	a1, b1, c2	Arthritis, Polyarthritis or pre arthritis, Nodosa	2	3
3	Respiratory System	b1, b2, c2	Oedma of nasal Cavity, epistaxis rhinitis, virus	3	3

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			aquine influenza, malignant catarrhal fever, glanders, sinuses, laryngeal hemiplasia		
4	Emphysema	b1, b2, c2	Heaves, pneumonia, guttural pouch, laryngitis,	4	3
5	First Written Exam			5	3
6	Respiratory System Continue	b1, b2, c2	Bronchitis, lung, emphysema, heaves, pneumonia	6	3
7	Stage of Developmental Pneumonia Contagious Bovine Pleural pneumonia	a1, b1, b2, c2 a3, b1, b2, c2	Broncho pneumonia, interstitial pneumonia	7	3
8	<b>Midterm Exam</b>			8	3
9	Digestive System	b1, b2, c2	Stomatitis, glossitis, palatitis, gingivitis, esophagitis, rumen ulcer, enteritis, catarrhal enteritis,	9	3
10	Suppurative Hepatitis (Liver Abscess)	a1, a2, b1, b2, c2	Lives cirrhosis, distention of gallbladder, heavy stones, pancreatitis	10	3
11	Second Written Exam			11	3
12	Urinary System	a1, b1, b2, c2	Nephritis, glomerulonephritis	12	3
13	Intestinal Nephritis	a1, b1, b2, c2	Acute intestinal nephritis, hypoxia I.N, I.N chronic i.n.	13	3
14	Genital System Fibrosis & Musculo-Skeletal System, Male Genital System, Nervous System	b1, b2, c2 a1, b1, b2, c2, d1, d2	Follicular cysts, lateral cyst dermoid cyst, Para ovarian cyst, pyometra Trichomoniasis, mastitis,	14	3
<b>Number of Weeks /and Units Per Semester</b>				<b>14</b>	<b>42</b>

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b- Training Aspect:				
Order	Training Tasks	CILOs (symbols)	Number of weeks	Contact hours
1	<b>Gross Specimens</b> (Heart of the sheep, lung, lymph node, liver, chest wall, kidney, urinary bladder)	a2, c1, d2	1	2
2	<b>Gross Specimens</b> (Ilium, tongue, uterus, skin, udder, abomasum, duodenum, omasum)	a2, c1, d2	2	2
3	<b>Study of histopathological slides</b> (Showing Fibrinous pericarditis, Organization, Endocardium Heart Pericardium & Myocardium Slides)	a2, c1, d2	3	2
4	<b>Study of histopathological slides</b> (Showing Haematocyte, Lung, atelectasis, emphysema)	a2, c1, d2	4	2
5	<b>Practical Exam UP ON CASE, SPECIMENS/ /HISTOPATHOLOGICAL SLIDES AVAILABILITY</b>	a2, c1, d2	5	2
6	<b>Study of histopathological slides</b> (Showing of Oedma, congestion, lung abscess, acute fibrinous pneumonia)	a2, c1, c2, d2	6	2
7	<b>Study of histopathological slides</b> (Showing of broncho-pneumonia, mycotic- pneumonia, adenomatosis, fibrinous pneumonia, parasitic pneumonia, vesicular glossitis, necrotic rumenitis, acute peritonitis)	a2, c1, d2	7	2
8	<b>Midterm Exam</b>		8	2
9	<b>Study of histopathological slides</b> (Showing acute catarrhal enteritis, diphtheroid necrotizing enteritis, mycotic enteritis, chronic granulomatous enteritis (paratuberculosis))	a2, c1, c2, d2	9	2
10	<b>Practical Exam UP ON CASE, SPECIMENS/ /HISTOPATHOLOGICAL SLIDES AVAILABILITY</b>		10	2

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11	<b>Study of histopathological slides</b> (Showing fascioliasis, focal hepatic necrosis, salmonellosis)	a2, c1, c2, d2	11	2
12	<b>Study of histopathological slides</b> (Showing toxic tubular nephrosis, embolic glomerulonephritis, chronic pyelonephritis)	a2, b1, c1, d2	12	2
13	<b>Study of histopathological slides</b> (Showing acute myositis, parasitic cyst, parasitic myositis)	a2, c1, d2	13	2
14	<b>Study of histopathological slides</b> (Showing infiltration of acute lumen with polymorphism (neutrophils), chronic suppurative myositis)	a2, c1, d2	14	2
<b>Number of Weeks /and Units Per Semester</b>			<b>14</b>	<b>28</b>

#### V. Teaching strategies of the course:

- In class lectures using PowerPoint presentation
- In class/lab quiz
- Written exams will take place during the semester
- Practical session on histopathological slides and or tissue
- Student will be encouraged to work together in groups
- Oral Exam

#### 3-Assessment Methods:

- 1.Quizzes should take place for lectures/labs at least once a week with a total of 20 quizzes through the semester (100 points)
- 2.Three written exams through the semester (100 points each)
3. Practical exam on histopathological slides or tissue specimens (100 points)

#### Grading Scale:

Grades are awarded on a scale from A to F, where A is the best grade(90-100) and F is a fail (<65).

#### VI. Schedule of Assessment Tasks for Students During the Semester:

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No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes (CILOs symbols)
1	Participation, quizzes and assignments	2-14	10	10%	a-d
2	Mid-semester exam	8	10	10%	a-d
3	Mid-Term Practical Exam	8	10	10%	a-d
4	Final Practical Exam	16	10	10%	a-d
5	Final Oral Exam	16	5	5%	a-d
6	Final Written Exam	16	55	55%	a-d
<b>Total</b>			<b>100</b>	<b>100%</b>	

### VII. Students' Support:

Office Hours/week	Other Procedures (if any)
Saturday-Wednesday from 8:00 a.m.-9:00 a.m.	Student can contact me via email

### VIII. Learning Resource (MLA style or APA style)S:

#### 1- Required Textbook(s) ( maximum two )

1. Pathologic Basis of Veterinary Disease, 4th Edition. MD McGavin & JF Zachary, 2006.
2. Veterinary Pathology, 5<sup>th</sup> Ed. Thomas Carlyle Jones, Ronald Duncan Hunt, 1983.
3. Disease Mechanisms/ Pathogenesis: Mechanisms of Diseases A textbook of Comparative General Pathology, 3rd Ed. DO Slauson & BJ Cooper, 2001.
4. Jubb, Kennedy and Palmerz Pathology of Domestic Animals, 5<sup>th</sup> Ed. Volumes 1-3. MG Maxie ( 2007.
5. A Colour Atlas of Veterinary Pathology, edited by J.M.V.M. Mouwen and E.C.B.M.de Groot.
6. Colour Atlas of Veterinary Histology, 2<sup>nd</sup> Ed. WJ Bacha & LM Bacha, 2000.
7. Atlas of Human Histology, 4<sup>th</sup> Ed. Mariano S. H. DI Fiore.

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<b>2- Recommended Readings and Reference Materials</b>	
<b>3- Essential References</b>	
<b>4- Electronic Materials and Web Sites etc.</b>	
	Students are free to search online for any available course materials related to the course subjects and taught lectures in the class.
<b>5- Other Learning Material:</b>	
	-

<b>X. Course Policies:</b>	
<b>1</b>	<b>Class Attendance:</b> MANDATORY TO ATTEND ALL COURSE LECTURES AND LABS
<b>2</b>	<b>Tardiness:</b> Not allowed at all. Students must be in class or in the practical session 10 minutes prior to the beginning of lectures or practical session.
<b>3</b>	<b>Exam Attendance/Punctuality:</b> Attendance is mandatory; absence is accepted with valid excuse. Students must be on time; tardiness is not permissible.
<b>4</b>	<b>Assignments &amp; Projects:</b> All assignments and projects are to be submitted on their due date. Any assignment turned in after the due date will not be accepted without valid and reasonable excuse.
<b>5</b>	<b>Cheating:</b> Not tolerated and may lead to <b>EXPELLING</b> the student from the program
<b>6</b>	<b>Plagiarism:</b> Not tolerated <b>AT ALL</b> and may lead to <b>EXPELLING</b> the student from the program
<b>7</b>	<b>Other policies:</b>

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1. All devices must be on silent or at least on vibration during lectures/labs.
2. Before any exam (written, practical, oral) we must check student's identity (student's card, ID, passport). Without any of these documents, the student will not be allowed in the exam room.
3. Any of type/ form of cheating is not allowed no matter what.
4. Maintain silence during lectures/exams and disturbance is not allowed. For any questions students should raise their hand and wait for permission to talk.

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## Course Plan of Special Pathology

X. - Information about Faculty Member Responsible for the Course:							
<b>Name of Faculty Member</b>	Dr. Hussein Abdulhadi Al-Wadei	<b>Office Hours</b>					
<b>Location &amp; Telephone No.</b>	Faculty of Veterinary Medicine Building	<b>SAT</b>	<b>SUN</b>	<b>MON</b>	<b>TUE</b>	<b>WED</b>	<b>THU</b>
<b>E-mail</b>	<a href="mailto:haalwadei@gmail.com">haalwadei@gmail.com</a>	8am 9am	8am 9am	8am 9am	8am 9am	8am 9am	

XI. Course Identification and General Information:						
1-	<b>Course Title:</b>	Special Pathology				
2-	<b>Course Number &amp; Code:</b>	PA371				
3-	<b>Credit hours:</b>	<b>C.H</b>				<b>Total</b>
		<b>Th.</b>	<b>Seminar</b>	<b>Pr.</b>	<b>F. Tr.</b>	
		3	-	1		4
4-	<b>Study level/year at which this course is offered:</b>	Second Semester of the Third Year				
5-	<b>Pre –requisite (if any):</b>	PA723				
6-	<b>Co –requisite (if any):</b>					
7-	<b>Program (s) in which the course is offered</b>	Veterinary Medicine				
8-	<b>Language of teaching the course:</b>	English				
9-	<b>System of Study:</b>	Two Semester per year				
10-	<b>Mode of delivery:</b>	Lectures and Practical				
11-	<b>Location of teaching the course:</b>	Faculty of Veterinary Medicine Building				

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## II. Course Description:

The Veterinary Pathology course begins with an introduction to the subject with their basics involved and the causes of diseases. Then the course deals with how these causes induce various forms of injuries to the structural and functional unit of the organism, the cell, even leading to the death of the cell(s) or the organism. During the course, you will be taught how the animal responds to such injuries (inflammation, chemical mediators, systemic effects, clinical manifestations) and recovers from the same (Healing, growth factors, cell cycle) and different hemodynamic changes occurring during disease processes. Also, the fundamentals of disease processes have to be understood before proceeding to the proper subject of systemic and specific pathology.

## II. Intended learning outcomes (ILOs) of the course:

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**After completing this course, students will be able to:**

- a1- Explain the occurrence, development and progression of [BASIC/COMMON] pathological changes in body systems and individual organs, and to relate their morphology at gross (macroscopic) and microscopic levels to clinically recognizable functional defects and disease states.
- a2- Make clear of appropriate means of sample collection and handling and the basic interpretation of hematology, clinical biochemistry and cytology investigations
- b1- Interpret macroscopic lesions in such a way as to make a meaningful diagnostic assessment in relation to clinical observations
- b2- Explain how animals normal functions changes and how healing processes works during diseases
- c1- Connect the results of clinical and laboratory evaluation of diseased animals to the underlining pathological mechanisms
- c2- Elaborate on how the dissolution of tissues and cells occur and on the difference between necrosis and apoptosis.
- d1- Familiar with the tissue samples being sent to veterinary pathology laboratories and is knowledgeable on how to take samples for various laboratories during necropsy.
- d2- Describe the reasons and contributing factors to certain anomalies that frequently occur in domestic animals.

**V. Course Content:**

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**A – Theoretical Aspect:**

Order	Topics List	Week Due	Contact Hours
1	a. Reading Syllabus and Knowing each other	1	3

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	b. Cardiovascular System		
2	Heart Water	2	3
3	Respiratory System	3	3
4	Emphysema	4	3
5	First Written Exam	5	3
6	Respiratory System Continue	6	3
7	Stage of Developmental Pneumonia Contagious Bovine Pleural pneumonia	7	3
8	<b>Midterm Exam</b>	8	3
9	Digestive System	9	3
10	Suppurative Hepatitis (Liver Abscess)	10	3
11	Second Written Exam	11	3
12	Urinary System	12	3
13	Intestinal Nephritis	13	3
14	Genital System	14	3
15	Fibrosis & Musculo-Skeletal System, Male Genital System, Nervous System	15	3
16	<b>Final Exam</b>	16	3
<b>Number of Weeks /and Units Per Semester</b>		<b>16</b>	<b>48</b>

### b- Training Aspect:

Order	Training Tasks	Week Due	Contact hours
1	Gross Specimens Heart of the sheep, lung, lymph node, liver, chest wall, kidney, urinary bladder	1	2

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2	Gross Specimens Ilium, tongue, uterus, skin, udder, abomasum, duodenum, omasum	2	2
3	Study of histopathological slides showing Fibrinous pericarditis, Organization, Endocardium Heart Pericardium & Myocardium Slides	3	2
4	Study of histopathological slides showing Haematocyte, Lung, atelectasis, emphysema	4	2
5	<b>First Practical Exam</b>	5	2
6	Study of histopathological slides showing of Oedma, congestion, lung abscess, acute fibrinous pneumonia	6	2
7	Study of histopathological slides showing of broncho-pneumonia, mycotic-pneumonia, adenomatosis, fibrinous pneumonia, parasitic pneumonia, vesicular glossitis, necrotic rumenitis, acute peritonitis	7	2
8	<b>Midterm Exam</b>	8	2
9	Study of histopathological slides showing acute catarrhal enteritis, diphtheroid necrotizing enteritis, mycotic enteritis, chronic granulomatous enteritis (paratuberculosis)	9	2
10	<b>Second Practical Exam</b>	10	2
11	Study of histopathological slides showing fascioliasis, focal hepatic necrosis, salmonellosis	11	2
12	Study of histopathological slides showing toxic tubular nephrosis, embolic glomerulonephritis, chronic pyelonephritis	12	2
13	Study of histopathological slides showing acute myositis, parasitic cyst, parasitic myositis	13	2
14	Study of histopathological slides showing infiltration of acute lumen with polymorphism (neutrophils), chronic suppurative myositis	14	2
15	Study of histopathological slides/ tissues/ organs upon availability	15	2
16	<b>Final Exam</b>	16	2
<b>Number of Weeks /and Units Per Semester</b>		<b>16</b>	<b>32</b>

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## V. Teaching strategies of the course:

- In class lectures using PowerPoint presentation
- In class/lab quiz
- Written exams will take place during the semester
- Practical session on histopathological slides and or tissue
- Student will be encouraged to work together in groups
- Oral Exam

## VI. Assessment Methods:

1. Quizzes should take place for lectures/labs at least once a week with a total of 20 quizzes through the semester (100 points)
2. Three written exams through the semester (100 points each)
3. Practical exam on histopathological slides or tissue specimens (100 points)

### Grading scale

Grades are awarded on a scale from A to F, where A is the best grade(90-100) and F is a fail (<65).

### N.B.:

1. Any student who pass the 25% of the class attendance will not be allowed for the final exam.
2. Students are advised to study hard in the class during the semester.
3. Retaking an exam is not allowed without valid excuse.

No.	Type of Assessment Tasks	Week Due	Mark	Proportion of Final Assessment
1	Participation, quizzes and assignments	2-14	10	10%
2	Mid-semester exam	8	10	10%
3	Mid-Term Practical Exam	8	10	10%
4	Final Practical Exam	16	10	10%
5	Final Oral Exam	16	5	5%

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6	Final Written Exam	16	55	55%
	<b>Total</b>		<b>100</b>	<b>100%</b>

## II. Learning Resources:

### 1- Required Textbook(s) ( maximum two ).

- Pathologic Basis of Veterinary Disease, 4th Edition. MD McGavin & JF Zachary, 2006.
- Veterinary Pathology, 5<sup>th</sup> Ed. Thomas Carlyle Jones, Ronald Duncan Hunt, 1983.
- Disease Mechanisms/ Pathogenesis: Mechanisms of Diseases A textbook of Comparative General Pathology, 3rd Ed. DO Slauson & BJ Cooper, 2001.
- Jubb, Kennedy and Palmerz Pathology of Domestic Animals, 5<sup>th</sup> Ed. Volumes 1-3. MG Max (Ed), 2007.
- A Colour Atlas of Veterinary Pathology, edited by J.M.V.M. Mouwen and E.C.B.M.de Groot
- Colour Atlas of Veterinary Histology, 2<sup>nd</sup> Ed. WJ Bacha & LM Bacha, 2000.
- Atlas of Human Histology, 4<sup>th</sup> Ed. Mariano S. H. DI Fiore.

### 2- Essential References.

### 3- Electronic Materials and Web Sites etc.

Students are free to search online for any available course materials related to the course subjects and taught lectures in the class.

## 4.Course Policies:

<b>1</b>	<b>Class Attendance:</b> MANDATORY TO ATTEND ALL COURSE LECTURES AND LABS
<b>2</b>	<b>Tardy:</b> Not allowed at all. Students must be in class or in the practical session 10 minutes prior to the

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	beginning of lectures or practical session.
<b>3</b>	<p><b>Exam Attendance/Punctuality:</b></p> <p>Attendance is mandatory; absence is accepted with valid excuse. Students must be on time; tardiness is not permissible</p>
<b>4</b>	<p><b>Assignments &amp; Projects:</b></p> <p>All assignments and projects are to be submitted on their due date. Any assignment turned in after the due date will not be accepted without valid and reasonable excuse.</p>
<b>5</b>	<p><b>Cheating:</b></p> <p>Not tolerated and may lead to <b>EXPELLING</b> the student from the program</p>
<b>6</b>	<p><b>Plagiarism:</b></p> <p>Not tolerated <b>AT ALL</b> and may lead to <b>EXPELLING</b> the student from the program</p>
<b>7</b>	<p><b>Other policies:</b></p> <ol style="list-style-type: none"> <li>1. All devices must be on silent or at least on vibration during lectures/labs.</li> <li>2. Before any exam (written, practical, oral) student's identity will be checked (student's card, ID, passport). Without any of these documents, the student will not be allowed in the exam room.</li> <li>3. Any of type/ form of cheating is not allowed no matter what.</li> <li>4. Maintain silence during lectures and disturbance is not allowed. Fr any questions students should raise their hand and wait for permission to talk.</li> </ol>

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