



## Course Specification of Veterinary Internal Medicine (1)

I. Course Identification and General Information:						
1	<b>Course Title:</b>	Veterinary Internal Medicine (1)				
2	<b>Course Number &amp; Code:</b>	IM464				
3	<b>Credit hours:</b>	C.H				Total
		Theoretical	Practical	Training	Seminar	
		3	1	-	-	4
4	<b>Study level/ semester at which this course is offered:</b>	Fourth Year - Frist Semester				
5	<b>Pre –requisite (if any):</b>	PH243				
6	<b>Co –requisite (if any):</b>	None				
7	<b>Program (s) in which the course is offered:</b>	Bachelor of Veterinary Medicine				
8	<b>Language of teaching the course:</b>	English language				
9	<b>Location of teaching the course:</b>	Faculty of Veterinary Medicine Building				
10	<b>Prepared by:</b>	Dr. Abdulraqeb Ali Alshami				
11	<b>Date of approval:</b>					

### II. Course description:

This course reviews internal diseases that effecting different body systems of animal species such as cattle, horses, sheep, goat and small animals. The etiology, clinical signs and pathogenesis of these diseases will be discussed in details as will as diagnosis, treatment and prevention. Students will learn concepts related to basic clinical examination, diagnostic principles and treatment for different animal species. Students will also be able to the development and application of appropriate professional attitudes, communication and problem solving skills.

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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>	Elucidate the most common internal medical diseases affecting all species of the animals, and describe appropriate management for these disorders.
<b>A3-</b>	Identifies various causes of animal diseases, animal epidemics and how they can be diagnosed; including common and life-threatening diseases of animals, poultry and fish.	<b>a2-</b>	Illustrate the causes, pathogenesis, clinical symptoms, diagnosis, treatment and prognosis of the diseases of digestive and respiratory system.

**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:		-Lectures using board, data shows and multimedia aids. - brainstorm. - discussion. -Self-learning by preparing essay and presentations (computer and faculty library) -Practical training (Clinical demonstrations, practice of skills, and discussions). (a) Field visits (farms and villages)	- Written exam - Practical exam - Oral exam - Quizzes - Report assignments - Discussion
<b>a1-</b>	Elucidate the most common internal medical diseases affecting all species of the animals, and describe appropriate management for these disorders.		
<b>a2-</b>	Illustrate the causes, pathogenesis, clinical symptoms, diagnosis, treatment and prognosis of the diseases of digestive and respiratory system.		

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		(b) General experimental animal teaching (c) Clinical and small group sessions (d) Outpatient clinic	
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**(B) Intellectual Skills:**

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

Program Intended Learning Outcomes (Sub-PILOs) in Intellectual skills		Course Intended Learning Outcomes (CILOs) of Intellectual Skills	
After completing this program, students will be able to:		After completing this course, students will be able to:	
<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 sick animal.	<b>b1-</b>	Interpret the results of laboratory diagnosis and writes prescriptions for all common diseased cases.
<b>B3-</b>	Design appropriate nursing and treatment care plans for different animal diseases and determine prioritizing of therapeutic.	<b>b2-</b>	Assess the appropriate treatment for affected animals according to the principles of the integrated management.

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

**Alignment of Learning Outcomes of Intellectual Skills to Teaching Methods and Assessment Methods:**

Course Intended Learning Outcomes (CILOs) in Intellectual Skills.		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		-Lectures using board, data shows and multimedia aids. - brainstorm. - discussion. -Self-learning by preparing essay and presentations (computer and faculty library) -Practical training (Clinical demonstrations, practice of	-Written exam -Practical exam -Oral exam - Quizzes - Report assignments - Discussion
<b>b1-</b>	Interpret the results of laboratory diagnosis and writes prescriptions for all common diseased cases.		
<b>b2-</b>	Assess the appropriate treatment for affected animals according to the principles of the integrated management.		

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		skills, and discussions). (a) Field visits (farms and villages) (b) General experimental animal teaching (c) Clinical and small group sessions (d) Outpatient clinic	
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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-	Perform a proper history for diseased animal and construct appropriate clinical assessments for animals.
C2-	Practicing practical, diagnostic, clinical and research skills, including the collection of samples in various fields of veterinary medicine and related sciences, in a safe and effective manner, taking into account the ethics of the profession.	c2-	Apply different techniques for diagnosis diseased animals and perform differentiating between similar diseases.

**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:		-Practical training (Clinical demonstrations, practice of skills, and discussions).	-Written exam -Practical exam -Oral exam
c1-	Perform a proper history for diseased animal and construct appropriate clinical		

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	assessments for animals.	(a) Field visits (farms and villages)	- Quizzes
c2-	Apply different techniques for diagnosis diseased animals and perform differentiating between similar diseases.	(b) General experimental animal teaching (c) Clinical and small group sessions (d) Outpatient clinic - Case study	- Report assignments - Discussion

**(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	
After completing this program, students will be able to:		After completing this course, students will be able to:	
D1-	Communicates effectively with Professional colleagues and animal owners and expresses his ideas clearly and objectively.	d1-	Communicate effectively with animal's owners using appropriate communication skills.
D2-	Develops his scientific, professional and research capabilities and follow what is emerging in his field of specialization and using computer applications and information and communication technology.	d2-	Cooperate in work effectively and share learned knowledge.

**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:		-Self-learning by preparing essay and presentations (computer and faculty library) - Cooperative learning and	- Achievement file - Evaluating student presentations. - Practical exam - Report assignments
d1-	Communicate effectively with animal's owners using appropriate communication skills.		
d2-	Cooperate in work effectively and share learned		

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knowledge.	working groups - Scientific visits - discussions - Assignments	- Discussion - Note performance
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## I. Course Content:

### 1 – Course Topics/Items:

#### a – Theoretical Aspect

Order	Topic List / Units	CILOs (symbols)	Sub-topic List	Number of weeks	Contact hours
1	General Systemic State	a1, a2, b1, b2, c1, c2,d1	Toxemia, Hyperthermia, Hypothermia, Fever	1	3
			Shock, Pain, Stress, Hypersensitivity	1	3
			Anaphylaxis and Anaphylactic shock, Edema	1	3
			Principles of fluid therapy	1	3
2	Diseases of digestive system	a1, a2, b1, b2, c1, c2,d1	Principles and Manifestations of alimentary tract dysfunctions	1	3
			-Principles of treatment of alimentary tract diseases -Ruminant digestive system drugs	1	3
			Diseases of oral cavity, pharynx and esophagus	1	3
3	Diseases of digestive system	a1, a2, b1, b2, c1, c2,d1	Diseases of forestomachs in ruminants	2	6
			Diseases of stomach, intestine and Equine colic	2	6
4	Diseases of respiratory system	a1, a2, b1, b2, c1, c2,d1	- Diseases of upper respiratory tract - Diseases of lungs	3	9

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Number of Weeks /and Units Per Semester	14	42
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<b>b- Training Aspect:</b>				
Order	Training Tasks	CILOs (symbols)	Number of weeks	Contact hours
1	<b>Examination for diagnosis:</b> - Case history - Examination of the diseased animals: General inspection (visual exam) Physical examination	a1, a2, b1, b2, c1, c2,d1	3	6
2	<b>General clinical examination:</b> -Respiration -Pulse -Temperature -Exam of mucous membrane -Exam of superficial LNs	a1, a2, b1, b2, c1, c2,d1	4	8
3	Examination of digestive system (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2,d1	4	8
4	Examination of respiratory system (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2,d1	3	6
<b>Number of Weeks /and Units Per Semester</b>			<b>14</b>	<b>28</b>

<b>IV. Teaching strategies of the course:</b>
<ul style="list-style-type: none"> <li>▪ Lectures using board, data shows and multimedia aids.</li> <li>▪ Self-learning by preparing essay and presentations (computer and faculty library)</li> <li>▪ Brainstorm</li> <li>▪ Discussion</li> <li>▪ Cooperative learning</li> </ul>

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- Practical training (Clinical demonstrations, practice of skills, and discussions).
  - (a) Field visits (farms and villages)
  - (b) General experimental animal teaching
  - (c) Clinical and small group sessions
  - (d) Outpatient clinic
- Tutorial classes (small group teaching)

### 3-Assessment Methods:

- Written exam
- Practical exam
- Oral exam
- Quizzes
- Report assignments
- Discussion

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(<50).

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

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%	a1, a2, b1, b2, c1, c2,d1
2	Mid-Term Exam	8	10	10%	a1, a2, b1, b2, c1, c2
3	Mid-Term Practical Exam	8	10	10%	a1, a2, b1, b2, c1, c2
4	Final Practical Exam	15	10	10%	a1, a2, b1, b2, c1, c2
5	Oral Exam	16	5	5%	a1, a2, b1, b2, c1, c2,d1

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6	Final Exam	16	55	55%	a1, a2, b1, b2, c1, c2
<b>Total</b>		<b>100</b>	<b>100%</b>		

### VI. Students' Support:

Office Hours/week	Other Procedures (if any)
Saturday-Wednesday from 8:00 a.m.-2 p.m.	Student can contact me via email

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

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

- Radostitis O.M., Gay C.C., Hinchcliff K. W. and Constable P. D. (2007): Veterinary Medicine, A textbook of the diseases of cattle, horses, sheep, pigs and goats 10<sup>th</sup> Ed. Baillere Tindall, London.
- Smith, B.P (2002): Large animal internal medicine, third ed., Mosby, St Louis, London, Philadelphia, Sydney, Toronto.

#### 2- Recommended Readings and Reference Materials

- Radostitis O.M., Gay C.C., Hinchcliff K. W. and Constable P. D. (2007): Veterinary Medicine, A textbook of the diseases of cattle, horses, sheep, pigs and goats 10<sup>th</sup> Ed. Baillere Tindall, London.
- Smith, B.P (2002): Large animal internal medicine, third ed., Mosby, St Louis, London, Philadelphia, Sydney, Toronto.
- Color atlas of diseases and disorders in cattle by. Blowey, Roger W and Weaver, A. David 20113<sup>rd</sup> Ed
- Pocket companion to textbook of veterinary internal medicine • Ettinger, Stephen J.
- Philip R.S., Colin D.P. and Alastair I. M (2011): Cattle Medicine. Manson Publishing/The Veterinary Press.
- Pugh D.G. (2002): Sheep and goat medicine . <sup>1</sup>st ed., Saunders An Imprint of Elsevier, Philadelphia, Pennsylvania.

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3-	<b>Essential References</b>
	<ul style="list-style-type: none"> <li>• Radostitis O.M., Gay C.C., Hinchcliff K. W. and Constable P. D. (2007): Veterinary Medicine, A textbook of the diseases of cattle, horses, sheep, pigs and goats 10<sup>th</sup> Ed. Baillere Tindall, London.</li> <li>• Smith, B.P (2002): Large animal internal medicine, third ed., Mosby, St Louis, London, Philadelphia Sydney, Toronto.</li> <li>• Textbook of veterinary internal medicine.</li> </ul>
4-	<b>Electronic Materials and Web Sites etc.</b>
	<p>Journal of Veterinary Internal Medicine (<a href="http://www.wiley.com/bw/journal.asp">http://www.wiley.com/bw/journal.asp</a>)</p> <ul style="list-style-type: none"> <li>• <a href="#">American College of Veterinary Internal Medicine</a></li> <li>• <a href="http://www.criticalcarevets.com">Internal Medicine www.criticalcarevets.com</a></li> <li>• <a href="http://www.animal-emergency.com">Internal Medicine www.animal-emergency.com</a></li> <li>• <a href="#">Central Texas Veterinary Specialty Hospital - Internal Medicine</a></li> <li>• <a href="#">IVIS Bookstore: Ruminant Medicine - International Veterinary</a></li> <li>• <a href="#">Alberta Agriculture, Food and Rural Development</a></li> </ul> <p>Livestock diseases and parasites.</p> <ul style="list-style-type: none"> <li>• <a href="#">American Association of Bovine Practitioners</a></li> </ul> <p>The American Association of Bovine Practitioners is an international association of veterinarians organized to enhance the professional lives of its members through relevant continuing education that will improve the well-being of cattle and the economic success of their owners, increase awareness and promote leadership for issues critical to cattle industries, and improve opportunities for careers in bovine medicine.</p> <ul style="list-style-type: none"> <li>• <a href="#">American Association of Small Ruminant Practitioners</a></li> <li>• <a href="#">Animal Disease Information</a></li> </ul> <p>Animal disease factsheets, image database, power points, zoonotic fast facts, disease wall charts, etc.</p> <ul style="list-style-type: none"> <li>• <a href="#">Bovine Tuberculosis Eradication: Uniform Methods and Rules</a></li> </ul> <p>(PDF) These Uniform Methods and Rules (UM&amp;R) are the minimum standards adopted and <b>approved</b> by the Animal and Plant Health Inspection Service (APHIS). They were established for the maintenance of tuberculosis-free accredited herds of cattle and bison and the maintenance of State or zone status in the U.S. Department of Agriculture's (USDA) tuberculosis eradication program. These minimum standards do not preclude the adoption of more stringent standards by any State or zone.</p> <ul style="list-style-type: none"> <li>• <a href="#">Cattle Diseases</a></li> </ul> <p>University of Nebraska - NU Institute of Agriculture and Natural Resources</p> <ul style="list-style-type: none"> <li>• <a href="#">Large Animal Veterinary Rounds</a></li> </ul> <p>Rounds transcripts presented at the Western College of Veterinary Medicine (University of Saskatchewan)</p>

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	<p>Department of Large Animal Clinical Sciences. The transcripts are available in pdf format and are searchable by year.</p> <ul style="list-style-type: none"> <li>• <a href="#">Food Animal Production Medicine Nutrition Topics</a></li> </ul> <p>Publications, information, and data collection tools include: Herd Based Tests For Metabolic Disorders, Introduction To Ruminant Acidosis, Herd Based Diagnosis Of Ruminant Acidosis, Nutritional Management Of Ruminant Acidosis, Factors That Contribute To Ruminant Acidosis, Ketosis And Hepatic Lipidosis, Hypokalemia Article, Calcium Chloride Gel Treatment Of Parturient Dairy Cows, and a Herd Nutrition History And Evaluation Form.</p> <ul style="list-style-type: none"> <li>• <a href="#">Small Ruminant Information</a></li> </ul> <p>A variety of extension publications on sheep from the University of Missouri. Covering subjects from Care of Ewes and Lambs at Lambing Time to Mastitis in the Ewe.</p> <ul style="list-style-type: none"> <li>• <a href="#">Equine Medicine</a></li> <li>• <a href="#">Pet Animals Medicine - News Results</a></li> <li>• <a href="#">Livestock Library</a></li> </ul>
<p><b>5- Other Learning Material:</b></p>	

<p><b>X. Course Policies:</b></p>	
<p><b>1</b></p>	<p><b>Class Attendance:</b> MANDATORY TO ATTEND ALL COURSE LECTURES</p>
<p><b>2</b></p>	<p><b>Tardy:</b> Not allowed at all. Students must be in class 10 minutes prior to the beginning of lectures.</p>
<p><b>3</b></p>	<p><b>Exam Attendance/Punctuality:</b> Attendance is mandatory; absence is accepted with valid excuse.</p>
<p><b>4</b></p>	<p><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.</p>
<p><b>5</b></p>	<p><b>Cheating:</b> Not tolerated and may lead to EXPELLING the student from the program</p>
<p><b>6</b></p>	<p><b>Plagiarism:</b> Not tolerated AT ALL and may lead to EXPELLING the student from the program</p>

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<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.</li> </ol>
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### **Course Plan of Veterinary Internal Medicine (1)**

X. - Information about Faculty Member Responsible for the Course:							
<b>Name of Faculty Member</b>	Dr. Abdurraqeb Ali Alshami	<b>Office Hours</b>					
<b>Location &amp; Telephone No.</b>	Sana'a Governorate 778466544	<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:Alshami.vet@gmail.com">Alshami.vet@gmail.com</a>	8am 2pm	8am 2pm	8am 2pm	8am 2pm	8am 2pm	

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XI. Course Identification and General Information:						
1-	Course Title:	Veterinary Internal Medicine (1)				
2-	Course Number & Code:	IM464				
3-	Credit hours:	<b>C.H</b>				<b>Total</b>
		<b>Th.</b>	<b>Seminar</b>	<b>Pr.</b>	<b>F. Tr.</b>	
		3	-	1	-	
4-	Study level/year at which this course is offered:	Fourth year – First Semester				
5-	Pre –requisite (if any):	PH243				
6-	Co –requisite (if any):	None				
7-	Program (s) in which the course is offered	Bachelor Veterinary Medicine				
8-	Language of teaching the course:	English language				
9-	System of Study:	Regular / Semesters				
10-	Mode of delivery:	Lectures and Practical				
11-	Location of teaching the course:	Faculty of Veterinary Medicine Building				

**II. Course Description:**

This course reviews internal diseases that effecting different body systems of animal species such as cattle, horses, sheep, goat and small animals. The etiology, clinical signs and pathogenesis of these diseases will be discussed in details as will as diagnosis, treatment and prevention. Students will learn concepts related to basic clinical examination, diagnostic principles and treatment for different animal species. Students will also be able to the development and application of appropriate professional attitudes, communication and problem solving skills

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

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

a1- Elucidate the most common internal medical diseases affecting all species of the animals, and describe appropriate management for these disorders.

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- a2-Illustrate the causes, pathogenesis, clinical symptoms, diagnosis, treatment and prognosis of the diseases of digestive and respiratory system.
- b1- Interpret the results of laboratory diagnosis and writes prescriptions for all common diseased cases.
- b2- Assess the appropriate treatment for affected animals according to the principles of the integrated management.
- c1- Perform a proper history for diseased animal and construct appropriate clinical assessments for animals.
- c2- Apply different techniques for diagnosis diseased animals and perform differentiating between similar diseases.
- d1- Communicate effectively with animal's owners using appropriate communication skills.
- d2- Cooperate in work effectively and share learned knowledge.

I. Course Content:			
A – Theoretical Aspect:			
Order	Topics List	Week Due	Contact Hours
1	<b>General Systemic State:</b> - Toxemia, Hyperthermia, Hypothermia, Fever - Shock, Pain, Stress, Hypersensitivity - Anaphylaxis and Anaphylactic shock, Edema - Principles of fluid therapy	1,2,3,4	12

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2	<b>Diseases of digestive system:</b> -Principles and Manifestations of alimentary tract dysfunctions -Principles of treatment of alimentary tract diseases -Ruminant digestive system drugs -Diseases of oral cavity, pharynx and esophagus	5,6,7	9
3	<b>Mid-Term Exam</b>	8	3
4	<b>Diseases of digestive system:</b> - Diseases of forestomachs in ruminants - Diseases of stomach, intestine and Equine colic	9,10,11,12	12
5	<b>Diseases of respiratory system:</b> - Diseases of upper respiratory tract - Diseases of lungs	13,14,15	9
6	<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	<b>Examination for diagnosis:</b> - Case history - Examination of the diseased animals: General inspection (visual exam) Physical examination	1,2,3	6
2	<b>General clinical examination:</b> -Respiration -Pulse -Temperature -Exam of mucous membrane -Exam of superficial LNs	4,5,6,7	6
3	<b>Mid-Term Exam</b>	8	2

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4	Examination of digestive system (cases, how to examine and treat)	9,10,11,12	8
5	Examination of respiratory system (cases, how to examine and treat)	13,14,15	6
6	<b>Final Exam</b>	16	2
<b>Number of Weeks /and Units Per Semester</b>		<b>16</b>	<b>32</b>

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

- Lectures using board, data shows and multimedia aids.
- Self-learning by preparing essay and presentations (computer and faculty library)
- Brainstorm
- Discussion
- Cooperative learning
- Practical training (Clinical demonstrations, practice of skills, and discussions).
  - (a) Field visits (farms and villages)
  - (b) General experimental animal teaching
  - (c) Clinical and small group sessions
  - (d) Outpatient clinic
- Tutorial classes (small group teaching)

#### V. Assessment Methods:

- Written exam
- Practical exam
- Oral exam
- Quizzes
- Report assignments

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- Discussion.				
No.	Type of Assessment Tasks	Week Due	Mark	Proportion of Final Assessment
1	Participation, quizzes and assignments	2-14	10	10%
2	Mid-Term Exam	8	10	10%
3	Mid-Term Practical Exam	8	10	10%
4	Final Practical Exam	15	10	10%
5	Oral Exam	16	5	5%
6	Final Exam	16	55	55%
<b>Total</b>			<b>100</b>	<b>100%</b>

## /I. Learning Resources:

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

- Radostitis O.M., Gay C.C., Hinchcliff K. W. and Constable P. D. (2007): Veterinary Medicine, A textbook of the diseases of cattle, horses, sheep, pigs and goats 10<sup>th</sup> Ed. Baillere Tindall, London.
- Smith, B.P (2002): Large animal internal medicine, third ed., Mosby, St Louis, London, Philadelphia, Sydney, Toronto.

### 2- Essential References.

- Radostitis O.M., Gay C.C., Hinchcliff K. W. and Constable P. D. (2007): Veterinary Medicine textbook of the diseases of cattle, horses, sheep, pigs and goats 10<sup>th</sup> Ed. Baillere Tindall, London.
- Smith, B.P (2002): Large animal internal medicine, third ed., Mosby, St Louis, London, Philadelphia, Sydney, Toronto.
- Textbook of veterinary internal medicine.

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

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Journal of Veterinary Internal Medicine (<http://www.wiley.com/bw/journal.asp>)

- [American College of Veterinary Internal Medicine](#)
- [Internal Medicine](#) [www.criticalcarevets.com](http://www.criticalcarevets.com)
- [Internal Medicine](#) [www.animal-emergency.com](http://www.animal-emergency.com)
- [Central Texas Veterinary Specialty Hospital - Internal Medicine](#)
- [IVIS Bookstore: Ruminant Medicine - International Veterinary](#)
- [Alberta Agriculture, Food and Rural Development](#)

Livestock diseases and parasites.

- [American Association of Bovine Practitioners](#)

The American Association of Bovine Practitioners is an international association of veterinarians organized to enhance the professional lives of its members through relevant continuing education that will improve the well-being of cattle and the economic success of their owners, increase awareness and promote leadership for issues critical to cattle industries, and improve opportunities for careers in bovine medicine.

- [American Association of Small Ruminant Practitioners](#)
- [Animal Disease Information](#)

Animal disease factsheets, image database, power points, zoonotic fast facts, disease wall charts, etc.

- [Bovine Tuberculosis Eradication: Uniform Methods and Rules](#)

(PDF) These Uniform Methods and Rules (UM&R) are the minimum standards adopted and approved by the Animal and Plant Health Inspection Service (APHIS). They were established for the maintenance of tuberculosis-free accredited herds of cattle and bison and the maintenance of State or zone status in the U.S. Department of Agriculture's (USDA) tuberculosis eradication program. These minimum standards do not preclude the adoption of more stringent standards by any State or zone.

- [Cattle Diseases](#)

University of Nebraska - NU Institute of Agriculture and Natural Resources

- [Large Animal Veterinary Rounds](#)

Rounds transcripts presented at the Western College of Veterinary Medicine (University of Saskatchewan) Department of Large Animal Clinical Sciences. The transcripts are available in pdf format and are searchable by year.

- [Food Animal Production Medicine Nutrition Topics](#)

Publications, information, and data collection tools include: Herd Based Tests For Metabolic Disorders, Introduction To Ruminant Acidosis, Herd Based Diagnosis Of Ruminant Acidosis, Nutritional Management Of Ruminant Acidosis, Factors That Contribute To Ruminant Acidosis,

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	<p>Ketosis And Hepatic Lipidosis, Hypokalemia Article, Calcium Chloride Gel Treatment Of Parturient Dairy Cows, and a Herd Nutrition History And Evaluation Form.</p> <ul style="list-style-type: none"> <li>• <a href="#">Small Ruminant Information</a></li> </ul> <p>A variety of extension publications on sheep from the University of Missouri. Covering subjects from Care of Ewes and Lambs at Lambing Time to Mastitis in the Ewe.</p> <ul style="list-style-type: none"> <li>• <a href="#">Equine Medicine</a></li> <li>• <a href="#">Pet Animals Medicine - News Results</a></li> <li>• <a href="#">Livestock Library</a></li> </ul>
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X. Course Policies:	
1	<p><b>Class Attendance:</b> MANDATORY TO ATTEND ALL COURSE LECTURES</p>
2	<p><b>Tardy:</b> Not allowed at all. Students must be in class 10 minutes prior to the beginning of lectures.</p>
3	<p><b>Exam Attendance/Punctuality:</b> Attendance is mandatory; absence is accepted with valid excuse.</p>
4	<p><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.</p>
5	<p><b>Cheating:</b> Not tolerated and may lead to EXPELLING the student from the program</p>
6	<p><b>Plagiarism:</b> Not tolerated AT ALL and may lead to EXPELLING the student from the program</p>
7	<p><b>Other policies:</b></p> <ol style="list-style-type: none"> <li>5. All devices must be on silent or at least on vibration during lectures/labs.</li> <li>6. 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>7. Any of type/ form of cheating is not allowed no matter what.</li> <li>8. Maintain silence during lectures and disturbance is not allowed.</li> </ol>

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