



## Course Specification of Veterinary Internal Medicine (3)

I. Course Identification and General Information:						
1	<b>Course Title:</b>	Veterinary Internal Medicine (3)				
2	<b>Course Number &amp; Code:</b>	IM466				
3	<b>Credit hours:</b>	C.H				Total
		Theoretical	Practical	Training	Seminar	
		2	1	-	-	3
4	<b>Study level/ semester at which this course is offered:</b>	Fifth Year - Frist Semester				
5	<b>Pre –requisite (if any):</b>	IM465				
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.

Prepared by  
Dr. Abdulraqeb Alshami

Quality Assurance Unit  
Dr. Abdulraqeb Alshami

Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
Ass. Prof. Dr. Huda Al-  
Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



**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>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>a1-</b> Illustrate the causes, pathogenesis, clinical symptoms, diagnosis, treatment and prognosis of metabolic, nutritional deficiencies and mammary glands diseases .
<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> Describe appropriate measures for health promotion as well as prevention of diseases in animals.

**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:		
<b>a1-</b> Illustrate the causes, pathogenesis, clinical symptoms, diagnosis, treatment and prognosis of metabolic, nutritional deficiencies and mammary glands diseases .	-Lectures using board, data shows and multimedia aids. - brainstorm. - discussion. -Self-learning by preparing essay and presentations (computer and faculty library)	- Written exam - Practical exam - Oral exam - Quizzes - Report assignments - Discussion
<b>a2-</b> Describe appropriate measures for health promotion as well as prevention of diseases in animals.	-Practical training (Clinical demonstrations, practice of skills, and discussions).	

Prepared by  
Dr. Abdulraqeb Alshami

Quality Assurance Unit  
Dr. Abdulraqeb Alshami

Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
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Emad

Rector of Sana'a University  
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		(a) Field visits (farms and villages) (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>B1-</b>	Competently practices analytical and critical thinking skills in studying and assessing health problems and reading the results of animal medical examinations and in related sciences.	<b>b1-</b>	Interpret the incidence and most important symptoms and signs of disease in animals.
<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>b2-</b>	Analyzes the results of laboratory diagnosis and writes prescriptions for all common diseased cases.

**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:			
<b>b1-</b>	Interpret the incidence and most important symptoms and signs of disease in animals.	-Lectures using board, data shows and multimedia aids. - brainstorm. - discussion.	-Written exam -Practical exam -Oral exam - Quizzes
<b>b2-</b>	Analyzes the results of laboratory diagnosis and writes prescriptions for all common	-Self-learning by preparing essay and presentations (computer and faculty	- Report assignments - Discussion

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Dean of the Faculty  
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Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
Ass. Prof. Dr. Huda Al-  
Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



	diseased cases.	library) -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	
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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:	
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.	c1-	Apply different techniques for diagnosis diseased animals and perform differentiating between similar diseases.
C3-	Reads the results of laboratory investigations and diagnostic scans and writes reports and prescriptions for all common cases in a proper way.	c2-	Perform an adequate clinical examination for diseased animal and identify deviations from normal.

**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	Teaching strategies/methods	Methods of assessment
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Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
Ass. Prof. Dr. Huda Al-  
Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



Professional and Practical Skills		to be used	
After completing this course, students will be able to:		-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 - Case study	-Written exam -Practical exam -Oral exam - Quizzes - Report assignments - Discussion
c1-	Apply different techniques for diagnosis diseased animals and perform differentiating between similar diseases.		
c2-	Perform an adequate clinical examination for diseased animal and identify deviations from normal.		

**(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 logistic & working teams and scientifically discuss in scientific manner in scientific discussions and meetings.
D3-	Practices problem-solving, negotiation, supervision and veterinary medical management skills and writing research reports efficiently and professionally.	d2-	Continue to self-learn and transcribe data to highlighted or solve problematic situation with fast response and write report on specific scientific related subject to the course.

**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	- Achievement file

Prepared by  
Dr. Abdulraqeb Alshami

Quality Assurance Unit  
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Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
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Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



d1-	Communicate effectively with logistic & working teams and scientifically discuss in scientific manner in scientific discussions and meetings.	essay and presentations (computer and faculty library)	- Evaluating student presentations.
d2-	Continue to self-learn and transcribe data to highlighted or solve problematic situation with fast response and write report on specific scientific related subject to the course.	- Cooperative learning and working groups - Scientific visits - discussions - Assignments	- Practical exam - Report assignments - Discussion - Note performance

## 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	Diseases of the newborn	a1, a2, b1, b2, c1, c2	- Perinatal and postnatal diseases - Congenital defects - Physical and environmental causes of perinatal disease - Neonatal infection	1	2
2	Metabolic diseases	a1, a2, b1, b2, c1, c2	- Milk fever - Downer cow syndrome - Hypomagnesemic tetanies - Ketosis - Pregnancy toxemia - Postparturient hemoglobinuria - Azoturia	5	10
3	Diseases of the mammary Glands	a1, a2, b1, b2, c1, c2	-Bovine mastitis -Mastitis of sheep -Mastitis of goats	1	2

Prepared by  
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Quality Assurance Unit  
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Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
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4	<b>Diseases caused by nutritional deficiencies</b>	a1, a2, b1, b2, c1, c2	<ul style="list-style-type: none"> <li>- Deficiency of vitamin A, E and selenium and D</li> <li>- Deficiency of copper, iodine and zinc</li> <li>- Deficiency of calcium, magnesium and phosphorus</li> <li>- Deficiency of vitamin C and manganese</li> <li>- Deficiency of thiamin, B12, riboflavin and choline</li> </ul>	5	10
5	<b>Diseases caused by poisonous materials</b>	a1, a2, b1, b2, c1, c2	Diseases associated with toxins in plants, fungi, cyanobacteria, clavibacteria, insects and animals	2	4
<b>Number of Weeks /and Units Per Semester</b>				<b>14</b>	<b>28</b>

**b- Training Aspect:**

Order	Training Tasks	CILOs (symbols)	Number of weeks	Contact hours
1	Newborn diseases (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2	1	2
2	Metabolic diseases (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2	5	10
3	Diseases of the mammary gland (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2	1	2
4	Diseases caused by nutritional deficiencies (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2	5	10
5	Diseases caused by poisonous materials (cases, how to examine and treat)	a1, a2, b1, b2, c1, c2	2	4
<b>Number of Weeks /and Units Per Semester</b>			<b>14</b>	<b>28</b>

Prepared by  
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Quality Assurance Unit  
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Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
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Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



## II. 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)

## 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).

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Quality Assurance Unit  
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Dean of the Faculty  
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 Al-Shawkany

Academic Development  
 Center & Quality  
 Assurance  
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 Emad

Rector of Sana'a University  
 Prof. Dr. Al-Qassim Mohammed Abbas





### III. 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,d2
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
	Final Exam	16	55	55%	a1, a2, b1, b2, c1, c2
<b>Total</b>			<b>100</b>	<b>100%</b>	

### IV. 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

### V. 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

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Al-Shawkany

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Emad

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	<p>Sydney, Toronto.</p> <ul style="list-style-type: none"> <li>• Color atlas of diseases and disorders in cattle by. Blowey, Roger W and Weaver, A. David 20113<sup>rd</sup> E</li> <li>• Pocket companion to textbook of veterinary internal medicine • Ettinger, Stephen J.</li> <li>• Philip R.S., Colin D.P. and Alastair I. M (2011): Cattle Medicine. Manson Publishing/The Veterinary Press.</li> <li>• Pugh D.G. (2002): Sheep and goat medicine . 1<sup>st</sup> ed., Saunders An Imprint of Elsevier, Philadelphia, Pennsylvania.</li> </ul>
<p><b>3- Essential References</b></p>	
	<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>
<p><b>4- Electronic Materials and Web Sites etc.</b></p>	
	<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> </ul>

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Al-Shawkany

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	<ul style="list-style-type: none"> <li>• <a href="#">Animal Disease Information</a> Animal disease factsheets, image database, power points, zoonotic fast facts, disease wall charts, etc.</li> <li>• <a href="#">Bovine Tuberculosis Eradication: Uniform Methods and Rules</a> (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.</li> <li>• <a href="#">Cattle Diseases</a> University of Nebraska - NU Institute of Agriculture and Natural Resources</li> <li>• <a href="#">Large Animal Veterinary Rounds</a> 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.</li> <li>• <a href="#">Food Animal Production Medicine Nutrition Topics</a> 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.</li> <li>• <a href="#">Small Ruminant Information</a> 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.</li> <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>
<b>5- Other Learning Material:</b>	

<b>X. Course Policies:</b>	
<b>1</b>	<b>Class Attendance:</b> MANDATORY TO ATTEND ALL COURSE LECTURES

Prepared by  
Dr. Abdulraqeb Alshami

Quality Assurance Unit  
Dr. Abdulraqeb Alshami

Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
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Emad

Rector of Sana'a University  
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2	<b>Tardy:</b> Not allowed at all. Students must be in class 10 minutes prior to the beginning of lectures.
3	<b>Exam Attendance/Punctuality:</b> Attendance is mandatory; absence is accepted with valid excuse.
4	<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.
5	<b>Cheating:</b> Not tolerated and may lead to EXPELLING the student from the program
6	<b>Plagiarism:</b> Not tolerated AT ALL and may lead to EXPELLING the student from the program
7	<b>Other policies:</b> <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>

### Course Plan of Veterinary Internal Medicine (3)

X. - Information about Faculty Member Responsible for the Course:						
Name of Faculty Member	Dr. Abdurqaeb Ali Alshami	Office Hours				
Location & Telephone No.	Sana'a Governorate 778466544	SAT	SUN	MON	TUE	WED THU

Prepared by  
Dr. Abdurqaeb Alshami

Quality Assurance Unit  
Dr. Abdurqaeb Alshami

Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
Ass. Prof. Dr. Huda Al-  
Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



E-mail	<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 (3)				
2-	Course Number & Code:	IM466				
3-	Credit hours:	<b>C.H</b>				<b>Total</b>
		Th.	Seminar	Pr.	F. Tr.	
		2	-	1	-	3
4-	Study level/year at which this course is offered:	Fifth Year - Frist Semester				
5-	Pre –requisite (if any):	IM465				
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:

Prepared by Dr. Abdulraqeb Alshami	Quality Assurance Unit Dr. Abdulraqeb Alshami	Dean of the Faculty Ass. Prof. Dr. Abdu Alraoof Al-Shawkany	Academic Development Center & Quality Assurance Ass. Prof. Dr. Huda Al- Emad
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Prof. Dr. Al-Qassim Mohammed Abbas



- a1- Illustrate the causes, pathogenesis, clinical symptoms, diagnosis, treatment and prognosis of metabolic, nutritional deficiencies and mammary glands diseases .
- a2- Describe appropriate measures for health promotion as well as prevention of diseases in animals.
- b1- Interpret the incidence and most important symptoms and signs of disease in animals.
- b2- Analyzes the results of laboratory diagnosis and writes prescriptions for all common diseased cases.
- c1- Apply different techniques for diagnosis diseased animals and perform differentiating between similar diseases.
- c2- Perform an adequate clinical examination for diseased animal and identify deviations from normal.
- d1- Communicate effectively with logistic & working teams and scientifically discuss in scientific manner in scientific discussions and meetings.
- d2- Continue to self-learn and transcribe data to highlighted or solve problematic situation with fast response and write report on specific scientific related subject to the course.

**X. Course Content:**

**A – Theoretical Aspect:**

Order	Topics List	Week Due	Contact Hours
1	<b>Diseases of the newborn:</b> - Perinatal and postnatal diseases - Congenital defects	1	2

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Quality Assurance Unit  
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Al-Shawkany

Academic Development  
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	- Physical and environmental causes of perinatal disease - Neonatal infection		
2	<b>Metabolic diseases:</b> - Milk fever - Downer cow syndrome - Hypomagnesemic tetanias - Ketosis - Pregnancy toxemia - Postparturient hemoglobinuria - Azoturia	2,3,4,5,6	10
3	<b>Diseases of the mammary glands:</b> -Bovine mastitis -Mastitis of sheep -Mastitis of goats	7	2
4	<b>Mid-Term Exam</b>	8	2
5	<b>Diseases caused by nutritional deficiencies:</b> - Deficiency of vitamin A, E and selenium and D - Deficiency of copper, iodine and zinc - Deficiency of calcium, magnesium and phosphorus - Deficiency of vitamin C and manganese - Deficiency of thiamin, B12, riboflavin and choline	9,10,11,12,13	10
6	<b>Diseases caused by poisonous materials:</b> Diseases associated with toxins in plants, fungi, cyanobacteria, clavibacteria, insects and animals	14,15	4
7	<b>Final Exam</b>	16	2
<b>Number of Weeks /and Units Per Semester</b>		<b>16</b>	<b>32</b>

**b- Training Aspect:**

Order	Training Tasks	Week Due	Contact hours
1	Newborn diseases (cases, how to examine and treat)	1	2

Prepared by  
Dr. Abdulraqeb Alshami

Quality Assurance Unit  
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Dean of the Faculty  
Ass. Prof. Dr. Abdu Alraoof  
Al-Shawkany

Academic Development  
Center & Quality  
Assurance  
Ass. Prof. Dr. Huda Al-  
Emad

Rector of Sana'a University  
Prof. Dr. Al-Qassim Mohammed Abbas



2	Metabolic diseases (cases, how to examine and treat)	2,3,4,5,6	10
3	Diseases of the mammary gland (cases, how to examine and treat)	7	2
4	Mid-Term Exam	8	2
5	Diseases caused by nutritional deficiencies (cases, how to examine and treat)	9,10,11,12,13	10
6	Diseases caused by poisonous materials (cases, how to examine and treat)	14,15	4
7	Final Exam	16	2
<b>Number of Weeks /and Units Per Semester</b>		<b>16</b>	<b>32</b>

**XI. 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)

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**II. Assessment Methods:**

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

**II. 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.**

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- 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.**

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](#)

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

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	<p>card, ID, passport). Without any of these documents, the student will not be allowed in the exam room.</p> <ol style="list-style-type: none"><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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