



Course specification

1-Basic information

Course Code:	IMD:5167
Course title :	Application of Endoscopy and ultrasonography in Internal Medicine
Academic year:	5th academic year
Program title:	B. Sc. Veterinary Medical sciences
Contact hours/ week	1 Practical hour/week
Approval Date	9/2019

2-Professional information

Overall aims of course:

This course aims to:

- 1-Acquire the essential knowledge concerning the new modalities of diagnosis in veterinary medicine.
- 2- Change the perspective view of the diseases after application of new modalities of diagnosis.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. State the essential physical knowledge upon which the instruments were designed.
- a2. Acquire the talent of clinical applications of the instruments.
- a3. Recognize the ability of instruments (ultrasonography and endoscopy) in diagnosis and treatment of the disease in veterinary field.
- a4. State the disease conditions requiring examinations by endoscopy and ultrasonography in veterinary diseases.

b- Intellectual skills

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

- b1. Identify the disease conditions requiring ultrasonography and endoscopic examinations.
- b2. Describe some important diseases conditions in animals by ultrasonography and endoscopy.
- b3. Interpret the ultrasonography and endoscopic reports.
- b4. Integrate the different steps of clinical examinations and lab investigation for making correct diagnosis.

c- Professional and practical skills

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

- c1. Prepare the instruments and tools for clinical examination.
- c2. Perform the proper application of the instruments.



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- c3. Identify potential hazard of using instruments.
- c4. Practice of using instruments.

d- General and transferable skills

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

- d1. Work in groups and manage time.
- d2. Develop the method of diagnosis in the field.
- d3. Ascertain the diagnosis of different diseases and differential diagnosis.
- d4. Exchange the knowledge of the diagnosis of different disease conditions among practitioners.
- d5. Maintain a professional image concerning behavior, dress and speech.
- d6. Be responsible toward work and instruments.
- d7. Communicate effectively with public, colleagues and appropriate authorities.
- d8. Achieve computer skills necessary to make use of medical databases and use the internet for communication.

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
5th year-1st semester Application of Endoscopy and ultrasonography in Internal Medicine (Pract. 1h./week)	1- Basics of new modalities of diagnosis in veterinary medicine (Physics of ultrasonography and endoscopy, application on phantom, preparation of ultrasonography and endoscopy for animals).	3	-	3
	2- Preparation for endoscopic interventions (preparation of animal for examination by ultrasonography and endoscopy).	2	-	2
	3- Systemic examination by ultrasonography and/or endoscopy (Digestive system (stomach, lower digestive system, colon, liver, pancrease) urinary system, respiratory system and sinuses, cardiovascular system , Heart, mammary gland examination, eye)	8	-	8
Total		13	-	13



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5-Teaching and learning methods

5.1. White board and data-show presentations.

5.1.1. Illustrations, charts, CD's, PowerPoint slides and recorded videos.

5.3- Practical lessons in faculty farm and on clinical cases from the faculty farm or from outside the faculty.

6-Teaching and learning methods for the students with disabilities

6.1. Not applicable.

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Student activities	--	---	-c1-c4	d1-d8
Practical Exam	a1-a4	b1- b4	c1-c4	---

7.2. Assessment schedules/semester:

Method	Week(s)
Practical exams	15 th week
student activities	During the course

7.3. Weight of assessments:per semester:

Assessment	Weight of assessment
Practical exams	80%
student activities	20%

8- List of references

8.1. Notes and books

-None.

8.2. Essential books:

1- Veterinary clinical diagnosis (1984): W. R. Kelly 1984, 3rd. Ed, Billiere Tindall, London.

2-Veterinary medicine: a textbook of the diseases of cattle sheep, pigs, goats and horses(2010): Radostits, O. M., Blood D. C., Gay, C. C., Arundal, J. H., 10th. Ed., Billiere Tindall, London.

3- Large Animal Internal Medicine (1998): Timthy, H. Oglivie, Williams & Wilkins.

4- Small Animal Internal Medicine (1997): Darcy, Show and Sherri Ihle, Williams & Wilkins

**These books are available in the library of faculty of Veterinary Medicine, Beni-Suef University.*

8.3. Recommended texts



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1- Veterinary clinical examination and diagnosis (2000): Radostits O. M. , 1st. Ed. Billiere Tindall, London

2 - Large animal internal medicine (1998): Bradford P. Smith, Mosby-Yearbook, Inc. USA.

**These books are found in the library of faculty of veterinary medicine, Beni-Suef University.*

8.4. Journals

- Journal of Veterinary Internal Medicine - Wiley Online Library
- JVIM - American College of Veterinary Internal Medicine
- Veterinary Medicine International — An Open Access Journal
- Journal of Equine Veterinary Science - Elsevier
- The Journal of Applied Research in Veterinary Medicine
- British Veterinary Journal - ScienceDirect.com
- Journal of Equine Veterinary Science

8.5. Websites

- www.ekb.eg/ar: Egyptian knowledge bank.
- www.Sciencedirect.com
- www.Pupmed.com
- www.google.com
- www.FAO

Course Coordinators

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Topics		Week	Intended learning outcomes of course (ILOs)			
			K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
1.	Basics of new modalities of diagnosis in veterinary medicine (Physics of ultrasonography and endoscopy, application on phantom, preparation of ultrasonography and endoscopy for animals).	1-3	a1- a4	b1-b4	-	d1-d8
2.	Preparation for endoscopic interventions (preparation of animal for examination by ultrasonography and endoscopy).	4-5	a1-a4	b1-b4	c1-c4	d1-d8
3.	Systemic examination by ultrasonography and/or endoscopy (Digestive system (stomach, lower digestive system .colon) urinary system, respiratory system and sinuses, cardiovascular system , Heart, mammary gland examination, eye)	6-13	a1-a4	b1-b4	c1-c4	d1-d8