# Course specification

## 1-Basic information

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|---|---|
| **Course Code:** | **IMD:5271** |
| **Course title :** | **Veterinary Internal Medicine (Part IV)** |
| **Academic year:** | **5th academic year** |
| **Program title:** | **B. Sc. Veterinary Medical sciences** |
| **Contact hours/ week** | **5 hours/week, (Lecture 2h/week, Practical 3h/week)** |
| **Approval Date** | 9/2019 |

## 2-Professional information

**Overall aims of course**:

**This course aims to:**

1-Identify clinical problems, as the internal medicine is the close stone in faculty of veterinary medicine.

2- Determine the cause (s), the pathophysiology, the data for diagnosis, and the differential diagnosis of similar disease conditions.

3- Deal logically with animal diseases.

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

**a- Knowledge and understanding:**

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

a1. Recall essential academic data for clinical studies.

a2. Identify biochemistry and chemistry reactions related to some endocrine and metabolic diseases.

a3. Describe the diagnosis steps and treatment of diseased cases.

a4. Ascertain knowledge of the best practice in solving animal disease Problem.

a5. List the causes, pathogenesis, clinical symptoms, investigations, treatment and prognosis of the most important internal medical diseases.

a6. Memorize steps of diagnosis that are traditionally used in veterinary field.

**b- Intellectual skills**

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

b1. Differentiate between healthy and diseased animal.

b2. Differentiate between the possible diseases causing the similar clinical manifestations.

b3. Integrate the diagnosis by using lab and new modalities of diagnosis.

b4. Interpret the results of clinical examination, lab and different modalities of diagnosis

b5. Make a decision of diagnosis, prognosis and treatment and management of the problem.

b6. Identify drugs in correct manner and deal with the economical losses in the animal farming.

**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 examinations.

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c2. Perform the proper traditional clinical examination and design the clinical diagnosis cheat for animal clinical examination in individual and herd animal.
c3. Analyze the incidence and symptoms of diseases.
c4. Perform appropriate therapies and their applications.

**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. Aware of the problems of his community and veterinary field problems
d3. Deal with colleagues and owners of cases with elegance and politeness.
d4. Correctly use drugs and treatment.
d5. Think logically about field problems and devises logical solutions to them
d6. Maintain a professional image concerning behavior, dress and speech.
d7. Be responsible toward work.
d8. Communicate effectively with public, colleagues and appropriate authorities.
d9. 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-2nd semester** Internal medicine (Part IV) (Lec. 2 h./week, Pract. 3h./week) | **1- Diseases of nutritional deficiencies.** (Deficiencies of energy and protein, Diseases associated with deficiencies of mineral nutrients , Disease associated with deficiencies of fat-soluble vitamins, Diseases associated with deficiency of water-soluble vitamins) | 10 | 5 weeks | - |
| | **2- Diseases of endocrine and metabolic disorders in animals.** (Milk fever, ketosis, fatty liver, hypomagnesaemia, hypophosphataemia, pregnancy toxemia, downer cow syndrome azoturia in equines ) | 10 | 5 weeks | - |
| | **3- Introduction to Veterinary neurology and diseases of nervous system in animal species.** (Principles of nervous dysfunction, Clinical | 15 | 3 weeks | - |

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|---|---|---|---|---|
| | manifestations of disease of the nervous system, Special examination of the nervous system, Principles of treatment of diseases of the nervous system, Pathophysiological mechanisms of nervous system disease, diseases of the brain, Diseases of the spinal cord).<br>**4- Clinical examination of nervous system and reflexes in animals.** | | | 3 Weeks |
| | **5- Clinical examination reports.** | 12 | - | 4 weeks |
| | **6- Applications of Clinical examination reports on normal and clinical cases** | 18 | - | 6 weeks |
| Total | | 65 | 13 (X 2hrs) | 13 (X 3hrs) |

## 5-Teaching and learning methods

**5.1. Lectures (brain storming, discussion) in which one or more of the following facilities are used:**

5.1.1. White board and data-show presentations.

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

**5.2- Self learning by preparing essays and presentations (computer researches).**

**5.3- Practical study (practical lessons in faculty farm, clinical cases from the faculty farm or from outside the faculty, and training visits (Visits to animal farms, field trips….etc).**

**5.4-Training visits (Visits to animal farms).**

## 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** |
| written Exam | a3-a6 | b1-b6 | ---- | ---- |
| Practical Exam | ------ | ----- | c1-c4 | ----- |
| Oral Exam | a1-a6 | b1- b6 | ----- | d1-d9 |
| Activities | a1-a6 | b1- b6 | c1-c4 | d1-d9 |

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### 7.2. Assessment schedules/semester:

| Method | Week(s) |
|---|---|
| Practical exams | 14th week |
| Final exams | 15th -17th week |
| Oral Exam | Managed by the department |
| Activities | Along the semester course |

### 7.3. Weight of assessments/semester:

| Assessment | Weight of assessment |
|---|---|
| Practical exams | 20% |
| Final exams | 50% |
| Oral exams | 20% |
| student activities | 10% |
| Total | 100% |

## 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

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

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- 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

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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- Diseases of nutritional deficiencies.** (Deficiencies of energy and protein, Diseases associated with deficiencies of mineral nutrients , Disease associated with deficiencies of fat-soluble vitamins, Diseases associated with deficiency of water-soluble vitamins) | Lecture: 1-5 | a1- a6 | b1-b6 | ---- | --- |
| **2- Diseases of endocrine and metabolic disorders in animals.** (Milk fever, ketosis, fatty liver, hypomagnesaemia, hypophosphataemia, pregnancy toxemia, downer cow syndrome azoturia in equines ) | Lecture: 6-10 | a1-a6 | b1-b6 | ---- | -- |
| **3- Introduction to Veterinary neurology and diseases of nervous system in animal species.** (Principles of nervous dysfunction, Clinical manifestations of disease of the nervous system, Special examination of the nervous system, Principles of treatment of diseases of the nervous system, Pathophysiological mechanisms of nervous system disease, diseases of the brain, Diseases of the spinal cord). | Lecture: 11-13 | a1- a6 | b1-b6 | --- | d1-d9 |
| **4- Clinical examination of nervous system and reflexes in animals.** | Practical: 11-13 | a1-a6 | b1-b6 | ---- | ---- |
| **5- Clinical examination reports.** | Practical: 1-4 | ----- | ------ | c1-c4 | d1-d9 |
| **6- Applications of Clinical examination reports on normal and clinical cases** | Practical: 5-10 | ---- | ---- | c1- c4 | d1-d9 |