



COURSE SPECIFICATION

(2016 / 2017)

1- Basic Information:

Course title: Special Surgery & lameness (A, B)

Academic Year: 5th year of B. V. Sc. Programme

Total teaching hours: 120 hrs

- Lectures: 60 hrs

- Practical (Clinical/small group sessions): 60 hrs

2- OVERALL AIMS OF THE COURSE:

At the end of this course, students should gain the basic concepts and the essential practical skills in the field of systemic surgery, Ophthalmology and lameness.

3- INTENDED LEARNING OUTCOMES (I. L. Os.):

3-A: KNOWLEDGE and UNDERSTANDING:

By the end of the course, students should be able to:

- **A1.** Study the surgical anatomy of the eye.
- **A2.** Review the common surgical affections of the eye.
- **A3.** Characterize the diagnostic procedures and therapeutics for ocular diseases.
- **A4.** Recognize the surgical anatomical features of different body systems.
- **A5.** List the common clinical signs of each special surgical affection.
- **A6.** Outline the steps of operative techniques used for correcting a surgical problems.
- **A7.** Recognize the clinical signs for lesions causing lameness in fore limbs and hind limbs.
- **A8.** Describe the line of treatment for different surgical affections of fore and hind limbs.
- **A9.** Express the post-operative care and preventive measures.

3-B: INTELLECTUAL SKILLS:

By the end of the course, students should be able to:

- **B1.** Analyze the history and clinical findings for diagnosis and differential diagnosis of special surgical problems.
- **B2.** Investigate ophthalmic, lameness and different body systems surgical problems.
- **B3.** Select the most suitable surgical technique and the associated complications.
- **B4.** Figure out the prognosis of the surgical affections. Interpret the most important symptoms and signs of disease in animals.

3- C: PRACTICAL AND PROFESSIONAL SKILLS:





By the end of the course, students should be able to:

- **C1.** Handle the special surgical instrumentation and therapeutic shoeing.
- **C2.** Carry out preparations for surgical patient.
- **C3.** Practice some diagnostic procedures and operative techniques.
- **C4.** Solve some post-operative complications.
- **C5.** Apply some surgical interventions in small and large animal cadavers.
- **C6.** Manage the post- operative care for each surgical intervention.
- C7. Design preventive measures to avoid surgical complications.

3- D: GENERAL AND TRANSFERABLE SKILLS:

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

- **D1.** Improve the communication skills with colleagues and teachers.
- **D2.** Construct a poster.
- **D3.** Manage time efficiently.

4- COURSE CONTENTS:

4.A:- First semester topics :-

| Topic | No. of ho | urs/ topic | |
|--------------------------------------|-----------|------------|--|
| Торіс | Lectures | Practical | |
| Eye lid affections. | | | |
| Affections of the conjunctiva | 2 | - | |
| Affections of the lacremal apparatus | | | |
| Affections of the cornea. | 2 | _ | |
| Affections of the sclera | 2 | _ | |
| Affections of the anterior chamber. | 2 | - | |
| Affections of the eye ball | 2 | | |
| Glaucoma. | 2 | - | |
| Ear and horn | 3 | - | |
| Respiratory system | 3 | - | |
| Digestive system | 6 | | |





| Tonio | No. of ho | ours/ topic | |
|--|-----------|-------------|--|
| Topic | Lectures | Practical | |
| Genital system (Male and Female) | 4 | - | |
| Urinary system | 4 | - | |
| Mammary gland (udder) | 2 | | |
| Practical | 1 | <u> </u> | |
| Dissection of the eye (equine) | - | 2 | |
| Examination of the eye | - | 2 | |
| Ocular therapeutics. | - | 2 | |
| Operation of the eye: Techniques for Entropion and Ectropion | - | | |
| correction. | | 2 | |
| Extirpation of the eye ball | - | 2 | |
| Gastrostomy & Splenectomy | - | 2 | |
| Rumenotomy and abomasal displacement | - | 4 | |
| Conventional and prosthetic hernioraphy. | - | 2 | |
| Tracheostomy & Trephining | - | 2 | |
| Castration in equine and pets | - | 4 | |
| Cystotomy & Perineal urethrotomy (pets & ruminants) | - | 4 | |
| Ovariohysterectomy | - | 2 | |
| Total hours /semester | 30 | 30 | |
| Total hours / course | 60 | | |

4.B:- Second semester topics:-





| Tonio | No. of I | nours | | |
|---|----------|-----------|--|--|
| Topic | Lectures | practical | | |
| Introduction to lameness. Conformation of the equine limbs. | 2 | - | | |
| Diagnosis of lameness. | 2 | - | | |
| Affections of the fore limb. | 8 | - | | |
| Affections of the hind limb. | 8 | - | | |
| Affections of hoof. | 6 | - | | |
| Affections of the claw. | 4 - | | | |
| Practical | | • | | |
| Examination of equine limbs | - | 2 | | |
| Instrumentation for special surgical procedures. | - | 2 | | |
| Technique of Palmer and planter neurectomy | - | 4 | | |
| Technique of Posterior tibial neurectomy | - | 4 | | |
| Technique of Medial patellar desmotomy | - | 4 | | |
| Technique of Cunean tenectomy | - | 4 | | |
| Shoeing for soundness | - | 4 | | |
| Claw amputation | - | 4 | | |
| Total hours /semester | 30 | 30 | | |
| Total hours / course | 60 | | | |

5- TEACHING & LEARNING METHODS:

*Lectures

• (using data show, white board, overhead projector and brain storming)

*Practical and small group sessions:

- 1: Practical training.
- (Practical demonstrations, practice of skills, and discussions)
- Outpatients clinic in faculty hospital

* Site visits

• Field visits for practical application

* Self learning

• Computer researches and faculty library visits to prepare essays and presentations.





- Library researches.
- Internet researches.
- Discussion in the researches.
- Preparation of posters
- Preparation of scientific reports.

* Audiovisual

Video show.

6. METHODS FOR STUDENTS With limited capabilities:-

- No disabled students until now, but if present the methods are:-
 - Activation of office hours.
 - Discussion with them during practical session.

7. STUDENT ASSESSMENT:

7.1.Assessments methods

| Method | Matrix alignment of the measured ILOs/ Assessments methods | | | | | | | | | | |
|----------------------|--|-------------|----------------------|---------|--|--|--|--|--|--|--|
| Wethod | K&U (a) | I.S (b) | P&P.S (c) | G.S (d) | | | | | | | |
| Student activities | | 1,2, 3 | | | | | | | | | |
| and periodical exams | 1&7 | 2,3,4 | - | 1-3 | | | | | | | |
| Practical exam | - | - | 1, 2, 3, 4, 5, 6 & 7 | 1 | | | | | | | |
| Final-Term exam | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 1, 2, 3 & 4 | - | 3 | | | | | | | |
| Oral exam | 1, 2, 4, 5, 7, 8 | 1, 2, 3 & 4 | - | - | | | | | | | |

7.2-Assessment schedules/semester

| Assessments methods | Time of Assessments |
|--------------------------------|--------------------------------|
| Student activities | Along the semester |
| periodical exams | 6 th Week each term |
| Practical exam | At the end of each term |
| Final-Term exam (written exam) | At the end of each term |
| Oral exam | At the end of each term |

7.3-Weight of assessments





| Assessments | 1 st term | 2 nd term | Total marks |
|---|----------------------|----------------------|-------------|
| Student activities and periodical examination | 5 | 5 | 10 |
| Written examination | 25 | 25 | 50 |
| Practical examination | 10 | 10 | 20 |
| Oral examination | 10 | 10 | 20 |
| Total | 50 | 50 | 100 |

8. LEARNING AND REFERENCE MATERIALS:

8-1: BASIC MATERIALS:

• **Department notes:** Department notes for special surgery, lameness, practical special surgery and practical lameness diagnosis and surgery.

8-2: Recmonded books:

- <u>Textbook of Small Animal Surgery: 2-Volume Set</u> by Douglas Slatter BVSc PhD MS FRCVS (Hardcover Dec 17, 2002)
- <u>Manual of Small Animal Surgery</u> by Theresa Welch Fossum DVM MS PhD Dipl ACVS (Paperback Jan 15, 2000)
- Atlas of Small Animal Surgery by William D. Dehoff (Hardcover Aug 30, 2009)
- <u>Techniques in Large Animal Surgery, Third Edition</u> by Dean Hendrickson (Hardcover Oct 19, 2007)
- Atlas of Large Animal Surgery by A. W. Kersjes and I. Nemeth (Hardcover Jun 1985)
- <u>Farm Animal Surgery</u> by Susan L. Fubini DVM and Norm Ducharme DVM (Hardcover Jan 15, 2004)
- Handbook of Small Animal Ophthalmic Surgery 2:, Corneal and Intraocular Procedures by Kirk
 N. Gelatt and J. P. Gelatt (Hardcover Jul 15, 1995)
- Essentials and Interactive Atlas of Veterinary Ophthalmology (Essentials of Veterinary Ophthalmology) by Kirk N. Gelatt (Paperback April 18, 2008)





- Essentials and Interactive Atlas of Veterinary Ophthalmology (Essentials of Veterinary Ophthalmology) by Kirk N. Gelatt (Paperback April 18, 2008
- Veterinary Ophthalmology (Kirk N. Gelatt., 4nd ed. 2013).
- Maggs DJ, Miller P, Ofri R. Slatter's fundamentals of veterinary ophthalmology: Elsevier Health Sciences; **2012**.
- Yorio T, Clark A, Wax MB. Ocular therapeutics: eye on new discoveries: Academic Press; **2011**.
- Clinical companion small animal dentistry, Saunders Elseier, 2013.
- Ruminant Surgery (R. P. S. Tyagi, 2006).
- Current Techniques in Small Animal Surgery (Bojrab, M. Joseph, 4th ed, 1998).
- Practical guide to lameness in horses (Ted S. Stashak DVM, 1996).
- Equine Surgery, 4th Edition (Jorg A. Auer, Dr Med Vet, MS and John A. Stick, DVM, 2012).
- Mechanisms of Disease in Small Animal Surgery (Bojrab, 2010).

8.3: web sites and journalsand so on

- WWW.PubMed.com
- Intrnational of veterinary information services (IVIS)
- www.Vet.net.com

Matrix alignment of the course topics and ILOs

First Semester

| Topic | | No. of hours /week | | Hours | Hours | ILOs | | | | |
|---|-------|-----------------------|---------------|--------------|--------|---------|------------|--------------|--------------|--|
| | Lect. | Pract. | /semes ter | for lect. | pract. | K&U (a) | I.S (b) | P.P.S (c) | G.T.S (d) | |
| Eye lid affections. Disease of the conjunctiva Affections of the lacrimal apparatus | 2 | - | 2 | 2 | - | 1,2 | 1,2,3,4 | - | 1-3 | |
| Affections of the cornea. Affections of the sclera | 2 | - | 2 | 2 | - | 1,2 | 1,2,3,4 | - | 1-3 | |





| | | hours eek | Total hours | Hours | Hours | | ILO | Os | |
|--|-------|--------------|---------------|--------------|---------------|---------|------------|--------------|--------------|
| Topic | Lect. | Pract. | /semes ter | for lect. | for pract. | K&U (a) | I.S (b) | P.P.S (c) | G.T.S (d) |
| Affections of the anterior chamber. Affections of the anterior Uvea & lens. Affections of the vitreous body. | 2 | - | 2 | 2 | - | 1,2 | 1,2,3,4 | - | 1-3 |
| Affections of the retina. Affections of the eye ball Glaucoma. | 2 | - | 2 | 2 | - | 1,2 | 1,2,3,4 | - | 1-3 |
| Affections of teeth and tongue | 2 | - | 2 | 2 | - | 4,5,6 | 2,3,4 | - | 1-3 |
| Esophagus, simple stomach affections | 2 | - | 2 | 2 | - | 4,5,6 | 2,3,4 | - | 1-3 |
| Compound stomach affections. | 2 | - | 2 | 2 | | 4,5,6 | 2,3,4 | - | 1-3 |
| Intestinal, rectal and anal affections. | 2 | - | 2 | 2 | - | 4,5,6 | 2,3,4 | - | 1-3 |
| Integumentry system (Ear, tail, Horn and udder) | 3 | - | 6 | 6 | - | 4,5,6 | 2,3,4 | - | 1-3 |
| Respiratory system | 3 | - | 2 | 2 | - | 4,5,6 | 2,3,4 | | 1-3 |
| genital system | 4 | - | 4 | 4 | - | 4,5,6 | 2,3,4 | | 1-3 |
| Urinary system | 4 | - | 6 | 6 | - | 4,5,6 | 2,3,4 | | 1-3 |
| Aseptic technique and instrumentation | - | 3 | 3 | | 3 | | | 1 | 1-3 |
| Dissection of the eye (equine) | - | 3 | 3 | • | 3 | - | - | - | 1-3 |





| | No. of hours /week | | Total hours | Hours for | Hours for | ILOs | | | | |
|---|-----------------------|--------|---------------|--------------|--------------|---------|------------|-------------------|--------------|--|
| Topic | Lect. | Pract. | /semes ter | for lect. | pract. | K&U (a) | I.S (b) | P.P.S (c) | G.T.S (d) | |
| Examination of the eye | - | 3 | 3 | - | 3 | 3 | - | 2,3,4 | 1-3 | |
| Ocular therapeutics. | - | 3 | 3 | - | 3 | 3 | - | - | 1-3 | |
| Operation of the eye: Techniques for Entropion and Ectropion correction. | - | 3 | 3 | - | 3 | - | - | 2,3,4 | 1-3 | |
| Extirpation of the eye ball | - | 3 | 6 | - | 6 | - | - | 2,3,4 | 1-3 | |
| Laparotomy (celiotemy) | - | 3 | 3 | - | 3 | | | 5 | 1-3 | |
| Gastrotomy, spleenectomy | - | 3 | 3 | - | 3 | | | 2,3,4 | 1-3 | |
| Rumenotomy | - | 3 | 3 | - | 3 | | | 2,3,4 | 1-3 | |
| Conventional and prosthetic herniorraphy. | - | 3 | ٣ | - | 3 | | | 2,3,4 | 1-3 | |
| Docking and ear trimming | - | 3 | 3 | - | 3 | | | 2,3,4,5, 6 & 7 | 1-3 | |
| Mastectomy | - | 3 | 3 | - | 3 | | | 2,3,4,5, 6 & 7 | 1-3 | |
| Terachestomy Trephining | - | 3 | 6 | - | 6 | | | 2,3,4,5, 6 & 7 | 1-3 | |
| Castration in equine, ruminants and pets | - | 3 | 6 | 1 | 6 | | | 2,3,4,5, 6 & 7 | 1-3 | |
| Cystotomy Perineal urethretomy (pets & ruminants) | - | 3 | 6 | - | 6 | | | 2,3,4,5, 6 & 7 | 1-3 | |
| Ovariohysterctomy | - | 3 | 6 | | 6 | | | 2,3,4,5, 6 & 7 | 1-3 | |
| Total | | | 60 | 30 | 30 | - | | | | |





Second Semester

| | | hours eek | Total | Hour | | | IL | Os | | | т | &L. meth | ods | |
|---|-------|--------------|--------------------|----------------|---|--------------|-------------|--------------|---------------|----------|----------|----------------------------|------------------|---------------|
| Topic | Lect. | Pract. | hours /semester | s for lect. | | K&U (a) | I.S (b) | P.P.S (c) | G.T. S (d) | Lect. | Pract. | Self& active leaning | Audio- visual | Case study |
| Introduction to lameness. Anatomy of the equine limb. | 2 | - | 2 | 2 | - | 7 | - | - | 1-3 | √ | | V | | |
| Diagnosis of lameness. Diagnosis of foot lameness | 2 | - | 2 | 2 | - | 8 | 1 | - | 1-3 | √ | | V | | |
| Conformation of the fore limb. Affections of the fore limb. | 2 | - | 4 | ٤ | - | 7,8,9 | 1,2,3, | - | 1-3 | V | | √ | | |
| Conformation of the hind limb. Affections of the hind limb. | 2 | - | 4 | 4 | - | 7,8,9, 10 | 1,2,,3 | - | 1-3 | V | | √ | | |
| Hoof affections. | 2 | - | 4 | 4 | - | 8,9,1 0 | 1,2,3, 4 | - | 1-3 | √ | | √ | | |
| Affections of the claw. | 2 | - | 4 | 4 | - | 8,9,1 0 | 1,2,3, 4 | - | 1-3 | V | | $\sqrt{}$ | | |
| Anatomy of the equine fore limb. Anatomy of the equine hind limb. Anatomy of the hoof and claw. | - | 3 | 3 | - | 3 | 7 | - | - | 1-3 | | V | | | V |
| Instrumentati on for special surgical procedures. | - | 3 | 3 | - | 3 | - | - | 1 | 1-3 | | V | | | V |
| Technique of Palmar and planter neurectomy | - | 3 | 6 | - | 6 | | - | 2,3,4 | 1-3 | | V | | | V |





| | No. of hours /week | | Total | Hour | Hours | | IL | Os | | | т | &L. meth | ods | |
|---|-----------------------|--------|--------------------|----------------|---------------|------------|------------|--------------|---------------|-------|--------|----------------------------|------------------|----------|
| Topic | Lect. | Pract. | hours /semester | s for lect. | for pract. | K&U (a) | I.S (b) | P.P.S (c) | G.T. S (d) | Lect. | Pract. | Self& active leaning | Audio- visual | |
| Technique of Posterior tibial neurectomy | - | 3 | 3 | - | 3 | - | - | 2,3,4 | 1-3 | | √ | | | V |
| Technique of Medial patellar desmotomy | - | 3 | 3 | - | 3 | - | - | 2,3,4 | 1-3 | | √ | | | V |
| Technique of Cunean tenectomy | - | 3 | 3 | - | 3 | | - | 2,3,4 | 1-3 | | √ | | | √ |
| Shoeing for soundness | - | 3 | 3 | - | 3 | - | - | 1 | 1-3 | | √ | | | √ |
| Claw amputation | - | 3 | 3 | - | 3 | - | - | 2,3,4 | 1-3 | | √ | | | V |
| Total | | | 60 | 30 | 30 | - | | | | | | | | V |

Course content ILOs Matre

Assessment ILOs Matrix:

| Methods | | I.L.O.S Evaluation | | | | | | | | | | |
|-----------------------|---------------|--------------------|----------------------------|------------------------|-----------|--|--|--|--|--|--|--|
| Wethous | Knowledge | Intellectual | Practical | general | allocated | | | | | | | |
| Written examination | A1-A2- A3-A4- | B1-B2-B3 | | D6 | 25 | | | | | | | |
| Oral examination | A1-A2- A3-A4- | B1-B2-B3 | | D6 | 10 | | | | | | | |
| Practical examination | | B1-B2-B3 | C1,C2,C3,C4 C5,C6,C7,C8 | D4.D5.D6 | 10 | | | | | | | |
| Activities | | B1-B2-B3 | | D1.D2.D3.D4. D5. D6 | 5 | | | | | | | |

Course Coordinator

Head of Department

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