COURSE SPECIFICATIONS

Postgraduate courses
(Master)

Prepared By
Anatomy & Embryology Department

University: Benha
Faculty: Veterinary Medicine

Course Title: Comparative Digestive System
Code: 3

Department offering the course: Anatomy and Embryology Department

Program(s) on which the course is given: Master Degree in Veterinary science (Anatomy)

Academic year / Level: 2011-2012

Date of specification approval: /2011

A- Basic Information

Title: Comparative Digestive System

Credit Hours:
Lecture: 2
Tutorial:
Practical: 2
Total: 4/w

B- Professional Information

1 - Overall Aims of Course: The postgraduate student gain the experience in the anatomy of the oral cavity, pharynx, esophagus, abdominal cavity, stomach ruminant stomach, intestine, liver, pancreas and salivary glands of ruminants, camel, horse, dog and pig. At the end of the course, the student will be able to identify the comparative features of digestive organs of different animal species and become able to use the anatomical knowledge in other veterinary fields such as medicine, surgery, .................. etc.

2 - Intended Learning Outcomes of Course (ILOs)

A-Knowledge and Understanding:
After successful completion of this course the student should be able to:

A1- Understand the anatomy of the digestive tract in different animal species.

A2- Know the anatomy of the pharynx in different species of animals and Know and Understand the anatomy of the ruminant stomach.

A3- Recognize the guttural pouch in equines and Trace the course of intestine in different species with reference to the cranial mesenteric artery. In addition to be able to locate each part of the intestinal tract by its position in the abdominal cavity in each species.

A4- Recall the position of the stomach in horse, dog and pig. Recognize the position of the liver and pancreas and Understand the relation of pancreas and where to palpate the abdomen for pain associated with pancreatitis.

B-Intellectual Skills

After successful completion of this course the student should be able to:

B1- Estimate the problems of the stomach like the direction of the gastric volvulus in dog and its effect on spleen.

B2- concludes the functional significance of the movement of the rumen palpated in the left paralumbar fossa and Assess inquiries from the animal owners and the official authorities reports (e.g. Forensic Medicine) and how to answer it.

B3- Estimate the surgical anatomy of pharyngostomy in the dog

C-Professional and Practical Skills

After successful completion of this course the student should be able to:

C1- Implement surface anatomy of the digestive tract on the living animals and in approaching some field cases.

C2- Use the radiographic anatomy of the esophagus and stomach in clearing some field problems.

C.3- Able to trocarize the distended stomach of the cow or horse and Able to
recognize the liver in radiographs.

**D-General and Transferable Skills**

After successful completion of this course the student should be able to:

D.1 Prepare a scientific papers and essays.
D.2 Acquires the skill of oral Presentation (Using the Over Head Projector, power point program and other 3D programs).
D.3 Constructing a poster and its presentation.
D.4 Time management & Work in a team.

**E- Attitude**

E1-Scientific Integrity.
E2-Knowledge of the rules of the scientific researches.
E3-Respect his profession and encourage cooperation with colleagues.

**3. Contents**

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of hours</th>
<th>Lecture</th>
<th>Tutorial/Practical</th>
</tr>
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<tbody>
<tr>
<td>Oral cavity, pharynx and esophagus</td>
<td>25</td>
<td>10</td>
<td>15</td>
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<tr>
<td>Abdominal cavity and peritoneum</td>
<td>25</td>
<td>10</td>
<td>15</td>
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<tr>
<td>Monolocular Stomach, Ruminant Stomach</td>
<td>25</td>
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<td>15</td>
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<tr>
<td>Intestine, Liver, pancreas and salivary glands</td>
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<td>15</td>
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<tr>
<td>Review article</td>
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<td>10</td>
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<tr>
<td>seminar</td>
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**4. Program - Course ILO Matrix:**

<table>
<thead>
<tr>
<th>Content title</th>
<th>A (K&amp;U)</th>
<th>B (I.S)</th>
<th>C (P&amp;P.S)</th>
<th>D (G&amp;T.S)</th>
<th>E (A)</th>
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5- Teaching and Learning Methods

5.1 lectures
5.2 Practical
5.3 practical training on living animals
5.4 reports

6- Student Assessment Methods

6.1 seminar & researches to assess student ability discussion his attendants
6.2 oral examination to assess ability to demonstrate his knowledge
6.3 practical exam to assess practical skills
6.4 final exam to assess different skills

Assessment Schedule

<table>
<thead>
<tr>
<th>Assessment 1</th>
<th>7th week</th>
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<tbody>
<tr>
<td>Assessment 2</td>
<td>Week 14th</td>
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<tr>
<td>Assessment 3</td>
<td>Week 21th</td>
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<td>Assessment 4</td>
<td>Week 28th</td>
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Weighting of Assessments

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<th>Component</th>
<th>Weighting</th>
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<tr>
<td>Mid-Term Examination</td>
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<tr>
<td>Final-term Examination</td>
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<tr>
<td>Oral Examination</td>
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<tr>
<td>Practical Examination</td>
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<tr>
<td>seminar &amp; researches</td>
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Other types of assessment
Total 100%

7- List of References
7.1- Books


7.2- Periodicals, web sites, … etc.

Periodicals
- Anatomia Histologia Embryologia (Journal of the World Association of Veterinary Anatomists)
- Anatomical Record
- Veterinary Radiology

Websites
- WAVA
- Veterinary Anatomy Course.
- CONVINCE
- Comparative Mammalian Brain Collection.
- Veterinary Courseware at Massey University, New Zealand

8- Facilities required for teaching and Learning

A) Available
- Formalin preserved specimens.
- X-ray images.
- Over Head Projector.
- Posters and colored sheets and transparencies.

B) Required
- Models of comparative organs of different animal species.
- Comparative Plastinated organs.
- Tools and electric appliances for organs.
- Mobile ultrasonic apparatus.
- Data Show.
- CDs. (anatomy, applied anatomy, radiographic anatomy ..etc.)
- Television circuit for the dissection room.
<table>
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<tr>
<th>Course Coordinator: Prof. Dr. Hatem Bahgaat.</th>
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<td>Head of Department: Prof. Dr. Hatem Bahgaat.</td>
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