**COURSE SPECIFICATIONS for M.V.Sc**

<table>
<thead>
<tr>
<th>University: Benha</th>
<th>Faculty: Veterinary Medicine</th>
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**Course Title:** Physiology of mammalian endocrine glands and growth  
**Code:** 20

**Department offering the course:** department of Physiology.

**Program(s) on which the course is given:** Master Degree of Veterinary Medical Sciences (Animal physiology).

**Academic year / Level:** 2011-2012

**Date of specification approval:** /2012

### A- Basic Information

Adapted by the faculty committee for formulating the academic standard for post-graduate using the generic guidelines for post-graduate adapted by NAQAAE.

**Credit Hours:**??/??????

<table>
<thead>
<tr>
<th>Lecture: 2</th>
<th>Tutorial:</th>
<th>Practical: 2</th>
<th>Total: 4/w</th>
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### B- Professional Information

#### 1 - Overall Aims of Course

- a-To ensure that students reserve a comprehensive theoretical base in veterinary endocrinology and reproduction.
- b-To provide students with the opportunities to develop communication, practical scientific research and teaching skills

#### 2 - Intended Learning Outcomes of Course (ILOs)

**A-Knowledge and Understanding:**

- **a1**-To describe the location and structure of endocrine glands.
- **a2**-To explain the structural and functional relationships of endocrine glands.
- **a3**-To identify the hormones produced by endocrine glands and specify their physiological effects.
- **a4**-To discuss the sequellae of abnormal levels of hormone secretion.
- **a5**-To understand physiology of growth.

**B-Intellectual Skills**

- **b bl**-To deal with ethical and professional issues pertaining to large and small animal production.
b2-To compare the physiological effects and mechanism of action of hormones regulating body functions.
b3-To discuss the subjects related to endocrinology and reproduction in the form of seminars, reports and presentations.

**C-Professional and Practical Skills:**

c1-To demonstrate practical skills in handling small and large animals.
C2-To undertake advanced laboratory techniques used for hormones measuring.
C3- to demonstrate parameters of growth.

**D-General and Transferable Skills**

dl-To demonstrate a spirit of intellectual curiosity through research work.
d2-To demonstrate a degree of independence in research and use self initiatives in solving problems.
d3-To demonstrate the ability to learn independently for a career of lifelong learning.

**E- Attitude**

e1-To be kind with animals during experimentation and sacrification.
e2-To respect his profession and encourage cooperation with colleagues in relevant departments.

### 3. Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of hours</th>
<th>Lecture</th>
<th>Tutorial/Practical</th>
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<tbody>
<tr>
<td><strong>Hormone cycle</strong></td>
<td>20</td>
<td>20</td>
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<tr>
<td><strong>Hypothalamus</strong></td>
<td>35</td>
<td>12</td>
<td>23</td>
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<tr>
<td><strong>Pituitary gland</strong></td>
<td>45</td>
<td>15</td>
<td>30</td>
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<tr>
<td><strong>Thyroid gland</strong></td>
<td>45</td>
<td>20</td>
<td>25</td>
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<tr>
<td><strong>Parathyroid gland</strong></td>
<td>11</td>
<td>8</td>
<td>3</td>
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<tr>
<td>The pancreas</td>
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<tr>
<td>The adrenal gland</td>
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<td>Pineal gland</td>
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<tr>
<td>Local hormones</td>
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| 20 | 15 | 5 |

The total hours are distributed over 44 weeks with 4 hours per week that gives a total of 176 hours.

4- Teaching and Learning Methods:

4.1-lectures
4.2-Practical
4.3-reports
4.5- Review article
4.6- seminars

5- Student Assessment Methods:

5.1 practical exam to assess practical skills
5.2 oral examination to assess ability to demonstrate his knowledge
5.3 final exam to assess different skills

Assessment Schedule

| Assessment 1 | Week 42th |
| Assessment 2 | Week 44th |
| Assessment 3 | Week 44th |

Weighting of Assessments

| Final-term Examination | 50% |
| Oral Examination | 25% |
| Practical Examination | 25% |

Total 100%

6- List of References

7.1- Course Notes
Veterinary Physiology.
7.2- Essential Books (Text Books)

7.3- Recommended Books

6.4- Periodicals, Web Sites, … etc
   Veterinary Journal
   Journal of Veterinary Internal Medicine.
   Veterinary Record.

8- Facilities Required for Teaching and Learning

| Data show, TV |
| Laboratory |
| Library |

Course Coordinator: Prof. Dr/ Mohamed ElSayed Azab
Head of Department: Prof. Dr/ Mohamed ElSayed Azab
Date: / /2012