Program Specification
Ph.D. Degree

(Anatomy & Embryology)
PROGRAM SPECIFICATIONS

University: Benha
Faculty: Veterinary Medicine

A Administrative Information

1. Program title: Ph degree in veterinary science (Anatomy)
2. Award/degree: Ph Degree
3. Department(s) responsible: Anatomy and Embryology
4. Coordinator: Prof. Dr / Hatem Bahgat Houssainy
5. External evaluator(s) Not Applicable
6. Date of most recent approval of program specification by the Faculty Council:

B Professional Information

1. The P.H.D graduate should be able to:
   * Easily performing the methods and principals of scientific research.
   * Add new scientific information and create new anatomical studies.
   * Applying the analytical and method of studying and making judgment to any field related to anatomical studies.
   * Doing cooperation between Anatomy and other sciences to yield the best results and enhance the relationship between them.
   * Developing practical research project.
   * Understanding the recent problems and new methods of research studying.
   * Performing several anatomical skills.
   * Going to develop and improve methods and tools to do researches that will help clinicians to perform their work easier.
   * Using the new techniques that will help him to perform his work accurately.
   * Taking a decision in presence of the available data.
   * Connecting with his team work effectively and lead them in different work aspects.
   * Working with available resources and try to find new ones.
   * Knowing his role in community servicing and environment keep out.
   * Improving himself regularly and transfer his works and experiences to others.
2. Academic standards

2a-The faculty mission, vision and strategic objectives are conformed to the academic standards. The learning outcomes are inline with the department and the faculty mission.

2b- the faculty adopts the general guidelines of the national authority for quality assurance and accreditation in higher education.

Academic reference standards (ARS) adopted by the faculty committee No 353 (13-2-2013)

3. Intended learning outcomes (ILOs) for program:

a- Knowledge and understanding:

On successful completion of this program the graduate will be able to:

a1- Understand the theories and principals and new scientific anatomical researches and the related fields.

a2- Understand the theories and principals of scientific research and its different tools.

a3- knowing the laws and principals for performing anatomy research

a4- To collect disparate pieces of information, analyze these and interpret the results and produce a written report that clearly communicates these finding.

a5- know his study effecting in environment and try to modify it to make enhance the community.

a6- Scientific development in the other fields in surgery and medicine.

b-Intellectual skills

On successful completion of this program the graduate will be able to:

b1- analyze and evaluate the anatomical data and use it for his advanced researches.

b2- evaluate their own research data and develop new approach for solving their research questions and technical problems.

b3-do new anatomical researches and add new information.

b4- write scientific paper.

b5-evaluate the risks in anatomical researches and work and planning to develop his work performance and discuss his work papers according to the anatomical facts.

c- Professional and practical skills

On successful completion of this program the graduate will be able to:

c1- can perform the professional anatomical skills

c2- Select and perform relevant statistical analysis on data obtained for their own research.
c3-Perform essential laboratory skills that help techniques to do easier associated with Anatomy research.

c4- planning to develop anatomical practices and improve others performance.

C5-Demonstrate competence in information technology including the use of computers for word processing, data handling and information retrieval.

d- General and transferable skills

On successful completion of this program the graduate will be able to:

dl- enable to connect effectively with all its ways and manage scientific meeting and mange the time effectively

d2- usage of technological skills to improve the anatomical practices.

d3- enable to learn others and perform tests to their performance and work in a team and understand how to lead them.

d4- self grading and continuous learning and use of different resources to get any required data.

e- Attitude

e1-Scientific Integrity and Be kind with animals during experimentation and sacrification

e2-Knowledge of the rules of the scientific researches.

e3-Respect his profession and encourage cooperation with colleagues.

4. Curriculum Structure and Contents

4.a Program duration (years): Ph.D degree from 3-5 years

4.b Program structure: three courses relevant to the title of the thesis form the department (Maximum 10-12hrs)

<table>
<thead>
<tr>
<th>Department</th>
<th>Code No.</th>
<th>Course title</th>
<th>Hours/week</th>
<th>Total contact hours /year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy and Embryology</td>
<td>1 (advanced)</td>
<td>Applied and surface anatomy</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2 (advanced)</td>
<td>Osteology and arthrology</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 (advanced)</td>
<td>Comparative digestive system</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4 (advanced)</td>
<td>Comparative urogenital system</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
### Anatomy and Embryology

<table>
<thead>
<tr>
<th>Course title</th>
<th>A (K&amp;U)</th>
<th>B (I.S)</th>
<th>C (P&amp;PS)</th>
<th>D (G&amp;TS)</th>
<th>E (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied and surface anatomy(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteology and arthrology(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative digestive system(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative urogenital system(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative respiratory, lymphatic and cardiology systems(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative nervous system , endocrine gland and special sense organs(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and special embryology(advanced)</td>
<td>A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avian anatomy(advanced)</td>
<td>A1</td>
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</tr>
</tbody>
</table>

5. Program - Course ILO Matrix:
6. Program admission requirements:

The applicant must have a master degree in the specialization subject he will register in one of the Egyptian universities or an equivalent degree from another recognized scientific institute.

7. Regulations for progression and program:

Registration period for the PhD. in veterinary medical science calendar at the last 3 years after the approval date by the faculty council and it should not exceed a period of five years, an extension could be approved by the faculty council depending on the supervisor report that approved by the department council and postgraduate and research committee taking into account the provisions of the universities regulation law.

1. the applicant should conduct the supplementary study proposed by both department council and approved by postgraduate and research committee and faculty council and it include:
   - 3-5 curriculums of the postgraduates curriculums stated in article (29) have not studied in the pre-master (10-12h/w) and the applicant will entitled to apply for the exam only after meeting attendance rate for each curriculum.

2. The applicant should pass written, practical and oral exams successfully in all courses, and the grade will be estimated according to one of the estimates stated in the article (34c).
   - The Faculty council has the right to deprive the applicant from entering the exam if this attendance courses is less than 75%.
   - Failure or depriving from entering one or more course did not requires reexamination of successful passed courses.

3. The applicant should conduct an innovate research on the subject that has been registered for at least 3 years from the date of registration approved by the faculty council. And the faculty council depending on a request from the supervisor has the right to authorize the student to do scientific experiments at recognized scientific institute.

4. The applicant should submit a seminar within 2 years after registration about his research and specialization subject filed that accepted by the committee of professors and assistant professors (3 in number).

5. the applicant should submit the thesis that accepted by the judging committee in an open discussion and the following policies should be met:
   - Pass all supplementary curriculums.
   - Acceptance of the seminar presented by the applicant.

6. the applicant should submit 4 copies of his thesis concerned department council to form committee examining the thesis to be presented to the postgraduate studies committee and the faculty council, and incase of thesis approval by the department council, the applicant will submit 6 copies for the faculty library, 1 copy for public
university library before introducing the report of examination committee to the post graduate studies committee and the faculty council.

7. The applicant take the PhD degree after he published two scientific papers from his thesis which be accepted in any scientific journal or conference.

- Registration will be during March and September of each year.

The applicant should submit a request enrolment for the dean who forwards bit to the concerned department council to determine the research subject and the study program and then take calendar after complete documentation on the faculty council for approval.

The thesis title should be identified before being submitted at least 2 months e and the judging committee has the right to amend the title without prejudice the subject of research.

The Faculty council has the right to suspend the student enrolment for a certain period if he has acceptable excuse preventing him from continuing his study or research, and his period will not counted within the period stated in article 16 and 20.

**Registration will be cancelled in one of the following cases:**

1- If the supervisor's report during the registration period is unsatisfactory (2 reports ).

2- If he did not submit his thesis before the end of registration period.

3- If the judging committee rejected the thesis twice.

The applicant should submit 10 copies of the thesis after its validity approved by the judging committee to be distributed to the committee members and faculty library, and the judging committee can decide the exchange of the thesis with other universities or printing at the expense of the university.

**System Of Examination For Postgraduate Studies As Follow:-**

- Time of written ex, 3 hours for each curriculum have 3 hours or more for theoretical / practical hours/week. If the curriculum less than 3 hours/week, the time of ex. is 2 hours only.

- The final degree of each curriculum which have 3 hours (theoretical & practical) per week is 100 & less than 3 hours 50 degrees & divided into 50% for written ex. and 50% for practical and oral ex.

**Grades of graduation are as follow:-**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>≥ 90</td>
</tr>
<tr>
<td>Very Good</td>
<td>≥ 80</td>
</tr>
<tr>
<td>Pass</td>
<td>≥ 70</td>
</tr>
<tr>
<td>Failed</td>
<td>45 to less than 60 weak</td>
</tr>
<tr>
<td></td>
<td>less than 45 very weak</td>
</tr>
</tbody>
</table>
8- Student Assessment Methods

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Method</th>
<th>To assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1.</td>
<td>seminar &amp; researches</td>
<td>student ability discussion his attendants</td>
</tr>
<tr>
<td>8.2.</td>
<td>oral examination</td>
<td>ability to demonstrate his knowledge</td>
</tr>
<tr>
<td>8.3.</td>
<td>practical exam</td>
<td>practical skills</td>
</tr>
<tr>
<td>8.4.</td>
<td>final exam</td>
<td>different skills</td>
</tr>
</tbody>
</table>

**Assessment Schedule**

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

**Weighting of Assessments**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-year Examination</td>
<td>10%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>50%</td>
</tr>
<tr>
<td>Oral Examination</td>
<td>10%</td>
</tr>
<tr>
<td>Practical Examination</td>
<td>20%</td>
</tr>
<tr>
<td>seminar &amp; researches</td>
<td>10%</td>
</tr>
<tr>
<td>Other types of assessment</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.

Program coordinator:

Name: Prof. Dr / Hatem Bahgat Houssainy
Signature:

Dean:

Name: Prof. Dr. Gamal Abd El Rehim Sosa
Signature:

Head of Quality Assurance Unit:

Name: Dr.
Signature