02 Department of: **Histology**

Course Specifications

Programme(s) on which the course is given**: PhD**

Major or Minor element of programmes: major

Department offering the program: **Faculty of Veterinary Medicine**

Department offering the course**: Histology**

Academic year / Level: **Postgraduate PhD**

Date of specification approval:

A- Basic Information

Title: General Histology (GH)

Code: M/D His 02

Lecture: 2 hours for 30 weeks

Practical:3 hour for 30 weeks

Total: 5 hour/week for 30 weeks

B- Professional Information

1 – Overall Aims of Course

a. **Good application of principals and methods of Scientific research.**

b. **Continuing addition of knowledge in the field of specialty**

c. **Application of the analytical method in the field of** General Histology

d. **Mixing of specific knowledge related to the field of study in the environmental considerations.**

e. **Good awareness by the surrounding and actual problems and recent theories in the field of specialty.**

f. **Discover the professional problems and the recent visions in the field of** General Histology

g. **Defining the professional problems and finding solutions.**

h. **Wide suitable special professional skills and using the suitable techniques in the field of** General Histology

i. **Direction to develop new methods and articles for performance of the profession.**

j. **Using the suitable techniques in the profession.**

k. **Active communication and the ability to lead work team.**

l. **Discussion making in the profession.**

m. **Using the available sources in order to obtain and keeping the highest values.**

n. **Awareness in society development and environmental preservation national and international**

o. **Transparency correctness and following the professional ethics.**

p. **Self academic and professional development and able for self learning.**

q. **Self continuing development and transfer the experience to the others**

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

a1- theories and principals related to the study and other fields related to the field.
a2- the effect of the applications on the environmental.
a3- the scientific development in the field of specialty.
a4- Ethics and laws of the profession in the field of specialty.
a5- principals of quality control assurance in the profession in the field of specialty.
a6- Principals and Ethics of scientific researches .

b- Intellectual Skills

b1- Skills in analysis and evaluation in the field of specialty and solution of problems.
b2- Skills in solution of specific problems in case of shortage of resources .
b3- new research studies adding to the knowledge .
b4- Skills in connection between different knowledge in solution of professional problems.
b5- Skills in research study or writing scientific paper about the research problems.
b6- evaluation of the risks in the profession in the field of specialty.
b7- planning for development of the performance in the field of specialty.
b8- decision making in the professional policy.

b8- Invention and innovation.
b9- Scientific documents based discussion.

c- Professional and Practical Skills

c1- Good performance of recent professional principals in the field of specialty .
c2- Writing and evaluation of professional reports.
c3- Evaluation of techniques in the field of specialty .
c4- using technology in the professional performance .
c5- planning for development of the professional performance and performance of the others.

d- General and Transferable Skills

d1-Different types of active communication .
d2-using of information technology on the behave of professional application .
d3-teaching the others and evaluation of their performance.
d4-self assessment and continuing self learning.
d5-uses of different resources for obtaining information and knowledge.
d6-working in leading team in the profession.
d7-management of scientific meeting the ability of time management.

3- Contents:

Topic	No. of hours	Lecture	Tutorial/Practical
Introduction	12	4	8
Tissue organization	12	4	8
Epithelial tissue	12	4	8
Connective tissue proper	12	4	8
Cartilage	12	4	8
Blood	12	4	8
Bone	12	4	8
Blood	12	4	8
Muscular tissue	12	4	8
Nervous tissue	12	4	8
Revision	12	4	8
MCQ- exam	1	0	0

4- Teaching and Learning Methods

4.1- Lectures.

4.2- Discussion.

4.3- Practical classes

5- Student Assessment Methods

5.1-. Written and MCQ exams to assess mostly knowledge and understanding.

5.2- Oral exam to assess knowledge information and intellectual skills mainly.

5.3-. Practical exam to assess professional and practical skills.

5.4- Activities depending upon internet-based search about specific topic to examine general and transferable skills.

Assessment Schedule

Assessment 1: Mid term MCQ exam	Week 23
Assessment 2: Practical exam	Week 23
Assessment 3: Final- Written exam	Week 24
Assessment 4: Oral term exam	Week 25

Weighting of Assessments

MCQ exams	10%
Final- term exam	50%
Oral term exam	10%
Practical exam	15 %
Other types of assessment	5%
Total	100%

6- List of References

6.1- Course Notes

- Veterinary Histology & Cytology (Part I): Department of Anatomy and Histology, Faculty of Veterinary Medicine, Assiut University.
- Ghallab, A. (2004). Introduction to functional and clinical histology, text and atls- part I. Giza, Elmelegy press.
- Ahmed YA, notes on histology (personal notes).

6.2- Essential Books (Text Books)

- Paulsen, D. (1997). Basic Histology; Examination and Board review. Norwalk, CT, APPLETON & LANGE.
- Gartner, L. and J. Hiat (2006). Color textbook of Histology, Saunders.
- Young, B. and Heath, J. (2000). Wheather's Functional Histology, a text and colour atlas. Sydney, CHURCHILL LIVINGSTONE.

6.3 Recommended Books.

6.4 Periodicals, Web Site,…etc

Periodicals:

- Journal of Histology.
- Journal of Electron Microscopy
- Cell

Web sites:

- *http://education.vetmed.vt.edu/Curriculum/VM8054/VM8054HP.htm*
- *http://www.ivis.org/home.asp*
- *http://www.svu.edu.eg/arabic/links/camps/qena/veter_medicine/index.htm*
- *http://www.lab.anhb.uwa.edu.au/mb140/*

7- Facilities Required for Teaching and Learning

No.	Instrument
1-	Paraffin microtome
2-	Hot air ovens
3-	Digital pH meter
4-	Digital balance
5-	Incubator
6-	Student microscopes
7-	Chemicals
8-	Image analysis system
9-	Transmission electron microscope
10-	Scanning electron microscope
11-	Slide projector
12-	Overhead projector
13-	Tissue processor
14-	Cryostat
15-	Deep freezer
16-	Fridges
17-	Ultra tome
18-	Water bath
19-	Jars and bottles
20-	Shaker
21-	Laminar flow
22-	Centrifuge

Course Coordinator: Dr. Yasser Abdel Galil Ahmed Ali

Date