



Histology Course Specifications 2019/2020

General Considerations

- Program: Bachelor of Veterinary Medicine (BVS)
- Element program: Major
- Faculty offering the Program: Faculty of Veterinary Medicine
- Department offering the course: Histology and Cytology

A. Basic Information

- Code: 1AHIS
- Lecture Tutorial: 2 hours/week
- Practical Session: 2 hours/week
- Total: 60 hours/semester (15 weeks)

B. Professional Information

1. Overall Aims of The Course

To familiarize students with the basic information about the characteristics and functions of the cell as well as those of three of the four major tissue types; namely epithelial, connective and muscular tissues and compare between them.

2. Intended Learning Outcomes (ILOs)

By the end of this course, students should be able to acquire....

a) Knowledge and Understanding

- Understand the principle component of the animal cell, epithelial, connective and muscular tissue.
- Know the types of epithelial tissues and their location in the animal body.
- Realize the types of connective tissue and their location in the animal body.
- Understand the types of muscles and their location in the animal body.

b) Intellectual Skills

- The ability to analyze the diversity of knowledge in the term of structure of cell, epithelial, connective and muscular tissues.
- The ability to distinguish with evidence and confidence how cell and epithelial, connective and muscular tissues appear under the microscope.
- Relate functions of those tissues and cells to their structures.
- Understand how the main functions of cells relate to subcellular structure.

c) Professional and Practical Skills

- Recognize the histological techniques suitable for studying each of the cell component and those of body tissues.
- When given a section of mammalian tissue under a microscope or a magnified picture of a tissue to identify the tissue, the cells that it contains and other visible structures of that tissue.
- Distinguish between the normal and abnormal structures.

d) General and Transferable Skills



- The ability to use simple word and IT skills (i.e., data processing, software, internet, and multimedia) and the library to find information.
- The ability to be self-motivated learners and responsive to feedback.
- Working in team (i.e., sharing presentations and discussions and solving problem).
- Enhancement of research capability through working in independent projects.

3. Contents

3.1. Lecture Contents

Lecture Topics		Hours
1	<i>Introduction to the cytology and cell membrane</i>	2hrs
2	<i>Membranous organelles</i>	2hrs
3	<i>Non-membranous organelles</i>	2hrs
4	<i>Cytoskeleton, inclusions and cell cycle</i>	2hrs
5	<i>Epithelial membranes</i>	2hrs
6	<i>Glandular epithelium</i>	2hrs
7	<i>Surface modifications of epithelium</i>	2hrs
8	<i>Connective tissues fibers</i>	2hrs
9	<i>Types of connective proper</i>	2hrs
10	<i>Types of connective tissue cells</i>	2hrs
11	<i>Supportive connective tissue; cartilage</i>	2hrs
12	<i>Supportive connective tissue; bone</i>	2hrs
13	<i>Blood</i>	2hrs
14	<i>Muscular tissue; skeletal muscle</i>	2hrs
15	<i>Muscular tissue; cardiac and smooth muscles</i>	2hrs
Total		30hrs

3.2. Laboratory Contents

Laboratory Topics		Hours
1	<i>Histological technique I</i>	2hrs
2	<i>Histological technique II</i>	2hrs
3	<i>Membranous organelles</i>	2hrs
4	<i>Non-membranous organelles</i>	2hrs
5	<i>Cytoskeleton and inclusions</i>	2hrs
6	<i>Epithelial membranes</i>	2hrs
7	<i>Glandular epithelium</i>	2hrs
8	<i>Surface modifications of epithelium</i>	2hrs
9	<i>Connective tissues fibers</i>	2hrs
10	<i>Types of connective proper I</i>	2hrs
11	<i>Types of connective tissue cells</i>	2hrs



12	<i>Supportive connective tissue; cartilage</i>	2hrs
13	<i>Supportive connective tissue; bone</i>	2hrs
14	<i>Blood</i>	2hrs
15	<i>Muscular tissue</i>	2hrs
Total		30hrs

4. Teaching and Learning Methods

4.1.Lectures

4.2.Practical (presentations followed by students' small group sessions).

4.3.Independent (Laboratory and home assignments supervised by tutor):

- a) Writing reports/assignments.
- b) Preparation of colored posters and slide presentations.
- c) Preparation of slides.
- d) Group discussion.

4.4 Computer Courseware: For independent student can be accessed at the education center: CLIVE standalone programs and any other recently developed web-based courseware.

Methods for disabled students:

No special arrangements are available now; however those students can consult our staff for help.

5. Students Assignment

5.1. Assignment Methods

- a) Mid and final term written examinations to assess knowledge and understanding.
- b) Periodical semester activities to assess general and transferable skills.
- c) Periodical examinations to assess professional and practical skills.
- d) Oral examination to assess intellectual skills, understanding of topics and ways of thinking in resolving problems.

5.2.Assessment Schedule

- Assessment 1: Midterm examination.....~10th week.
- Assessment 2: Final examination (practical).....15th week.
- Assessment 3: Final examination (oral).....Together with written exam.
- Assessment 4: Final examination (written)... According to faculty schedule.

5.3.Writing of Assessments

- a) *Semester formative work:*
 1. Midterm examination.....10%
 2. Home and laboratory periodical assignments.....10%
 - b) *Final term examinations:*
 1. Written examination.....50%
 2. Oral examination.....15%
 3. Practical examination.....15%
 - c) *Other types of assessment*.....00%
- Total.....100%**



6. List of References

- 6.1. Course Notes (lecture and practical notes):** Histology Headlines.
- 6.2. Essential Textbooks:** Dellmann's Textbook of Veterinary Histology; Eurell J. and Frappier, B. (2006), 6th Edition. Blackwell Publishing.
- 6.3. Recommended Books:** Bloom, W. and D. W. Fawcett (1994): Textbook of Histology; 12th Ed. W. B. Saunders C., Philadelphia.
- 6.4. Web site:** <http://www.histology.to/links.html>

7. Facilities Required for Teaching and Learning

- 7.1. For Lecture:** A large hall equipped with white board, data show and computer.
- 7.2. For Laboratory sessions:** Laboratory room with mono and binocular microscopes, slide boxes, staining sets, colored posters, charts, atlases, handouts, and pamphlets.
- 7.3. For small group discussions (75 students):** Convenient hall equipped with white board, computer and video projector.
- 7.4. Digital library,** Internet and networking connections for easy access of online course materials and the recommended websites by our staff.

Course Coordinator

Head of Department

Dr/ Sahar Favez. Eid

Prof. Dr/ Mohamed Elnasharty