



مركز الاعتماد
وَضْمَانُ الجُودَة
ACCREDITATION & QUALITY ASSURANCE CENTER



The University of Jordan

Accreditation & Quality Assurance Center

Course Syllabus

Histology for dental students I

1	Course title	Histology-I
2	Course number	0542226
3	Credit hours (theory, practical)	3 (2 theory, 1 practical)
	Contact hours (theory, practical)	Theory: 2 Practical: 1
4	Prerequisites	Biology
5	Program title	DDS program
6	Program code	13
7	Awarding institution	The University Of Jordan
8	Faculty	School of Medicine
9	Department	Anatomy and Histology
10	Level of course	Second year dental students
11	Year of study and semester (s)	2016/2017 first semester
12	Final Qualification	DDS
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	1/9/2016

16. Course Coordinator:

Dr. Heba Kalbouneh
 School of Medicine
 Ground floor
 Office number 4
 Tel: 065355000/23480
 Email: heba.kalbouneh@ju.edu.jo , heba.kalbouneh@gmail.com

17. Other instructors:

Mrs. Ihsan Al-Omari (BSc, MSc)

18. Course Description:

Lecture topics and laboratory experiences incorporate the basic topics in microscopic anatomy of the human body. The course deals mainly with basic tissues (epithelium, connective tissue (including: adipose tissue, bone and cartilage), muscles and nerves).

In the lectures (1hour/week), the normal microscopic and submicroscopic structure of cells and tissues of the body are described. In Laboratory sessions (2hour/week), you will examine and analyze the materials being studied using both light and electron microscopy micrographs. Students should be able to differentiate the various histological structures from each other. Functional correlations often with some elements of clinical significance are presented throughout the course.

19. Course aims and outcomes

Aims:

The knowledge that you will derive from this course will extend what you learn in Gross Anatomy. In addition, your study of cells, tissues and organs will correlate with information on their function that you receive in this and other courses. This course will also provide basic knowledge concerning the structure and function of normal cells, tissues and organs, which is a prerequisite for the study of their pathology.

B- Intended Learning Outcomes (ILOs):

Upon successful completion of this course students will be able to ...

1-Describe the detailed structure of the cell organelles under electron microscope and label normal cell structure

2- describe normal cell function

3- identify the organization of normal cells into tissues

4- recognize and differentiate the type of tissue under light microscope of H&E stained slides

5- identify the differential characteristics of cells, tissues, and organs

6- recognize the variations in structure that fall within the normal range

7- explain the relationships of structure and function

8- learn to compare normal with abnormal tissues at the light microscopic level

9- describe the histology of tissue using appropriate medical terminology

10- demonstrate critical thinking skills to describe possible pathologic outcomes of dysfunctional cells and tissues

11- develop communication skills by effective interaction with peers and academic staff

12- deal with colleagues in an honorable and generous way

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Overview of histology	1	Dr. Heba Kalboun eh			Junqueira's Basic Histology
Cell overview	2	Dr. Heba Kalboun eh	Describe the detailed structure of the cell organelles under electron microscope Label normal cell structure Describe basophilia and acidophilia	Assignments and quizzes Midterm Exam Final exam	Junqueira's Basic Histology
Epithelium	3 & 4	Dr. Heba Kalboun eh	List the principal functions of epithelial tissues Give examples of epithelia that derived from each embryonic germ layer Structural and functional characteristics of epithelial tissues that distinguish them from other tissue types Classify epithelia according to morphological criteria.	Assignments and quizzes Midterm Exam Final exam	Junqueira's Basic Histology

			<p>Identify different types of epithelia</p> <p>Identify microvilli and cilia cells.</p> <p>Describe different types of Epithelial cell junctions.</p> <p>Describe the basal lamina</p> <p>Compare basal lamina and Basement Membrane</p> <p>Explain the criteria used for Classification of the glands.</p> <p>Distinguish between endocrine Glands and exocrine gland.</p> <p>Identify mucus , serous and Seromucus glands.</p>		
Connective tissue, adipose tissue, blood	5,6&7	Dr. Heba Kalboun eh	<p>State the general functions of connective tissues.</p> <p>State the names and properties of the principal fibers and cell types of CT</p> <p>Outline the role of the matrix in conferring differing properties of CT.</p> <p>Identify the tissue, fibroblasts, macrophages, mast cells and plasma cells.</p> <p>Identify collagen fibers, reticular fibers and elastic fibers.</p> <p>Identify the loose, regular dense</p>	<p>Assignments and quizzes</p> <p>Midterm Exam</p> <p>Final exam</p>	Junqueira's Basic Histology

			<p>and irregular dense connective tissue.</p> <p>Differentiate between brown and white adipose tissue</p> <p>Describe the composition of the blood</p> <p>State the general features of Red blood cells</p> <p>State the general features of different types of White blood cells</p>		
Midterm exam	8	Dr. Heba Kalboun eh			
Cartilage	9	Dr. Heba Kalboun eh	<p>Differentiate cartilage tissue from other body tissues.</p> <p>Differentiate the three types of cartilage.(hyaline, elastic, and fibrocartilage tissue)</p> <p>Differentiate the extracellular matrix of chondrocytes.</p> <p>Identify isogenic groups.</p> <p>Locate the perichondrium in the two types of cartilage that arise.</p> <p>Describe the two types of cartilage growth</p>	<p>Assignments and quizzes</p> <p>Midterm Exam</p> <p>Final exam</p>	Junqueira's Basic Histology
Bone	10, 11	Dr. Heba Kalboun	Identify and differentiate between the compact bone and spongy	Assignments and	Junqueira's Basic

		eh	<p>bone.</p> <p>Identify the growth plate and articular cartilage.</p> <p>Describe the bone matrix.</p> <p>Identify the osteons and Haversian canals.</p> <p>Differentiate between osteoblasts, osteocytes and osteoclasts</p> <p>Describe the basic steps of endochondral and intramembranous ossification and give examples</p> <p>Differentiate between woven and lamellar bone.</p>	<p>quizzes</p> <p>Midterm Exam</p> <p>Final exam</p>	Histology
Nervous tissue	12	Dr. Heba Kalboun eh	<p>Organize the nervous system into structural and functional divisions</p> <p>Compare sensory and motor functions</p> <p>Distinguish between the somatic and autonomic nervous systems</p> <p>Identify the cellular components of nervous tissue (neurons and neuroglia)</p> <p>Describe the structure of a neuron.</p> <p>Differentiate between axon and dendrite.</p>	<p>Assignments and quizzes</p> <p>Midterm Exam</p> <p>Final exam</p>	Junqueira's Basic Histology

			<p>Describe the basic steps of myelination process</p> <p>Identify the types and distribution of neuroglial cells</p>		
Muscle tissue	13	Dr. Heba Kalboun eh	<p>Describe the structure and function of the different types of muscle.</p> <p>Describe the basic structure of skeletal muscle contractile cells</p> <p>Describe the basic structure of cardiac muscle contractile cells.</p> <p>Describe the basic structure of smooth muscle contractile cells.</p>	<p>Assignments and quizzes</p> <p>Midterm Exam</p> <p>Final exam</p>	Junqueira's Basic Histology
Skin	14, 15	Dr. Heba Kalboun eh	<p>Differentiate between thin skin and thick skin</p> <p>Locate the epidermis, dermis and hypodermis, both thin skin and thick skin.</p> <p>Locate the layers of the epidermis</p> <p>Locate keratinocytes, melanocytes and Langerhans cells in the epidermis.</p> <p>Identify the dermis papillary and reticular dermis.</p> <p>Locate and characterize hair follicles</p> <p>Identify and differentiate sweat and sebaceous glands.</p>	<p>Assignments and quizzes</p> <p>Midterm Exam</p> <p>Final exam</p>	Junqueira's Basic Histology

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Powerpoint presentations

Using animations to illustrate basic histological principles, integrate histological structure with physiological function, and assist students to create mental pictures as they learn.

Histology exercises and quizzes that consist of multiple-choice questions will be available for each module of study.

An online chat session will be available at the end of each course to address questions related to the lectures and laboratory sessions.

Web based resources: <http://www.histologyguide.org/index.html>

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Assessment 1: Midterm Exam 40%

Assessment 2: Final Exam 60% (30% theory, 30% practical)

23. Course Policies:

Attendance policies:

Students are expected to attend all class sessions as listed on the course calendar. Students are not **allowed** to be **absent** for more than **15%** of the credit hours of the course. All students are required to wear a lab coat during the laboratory session.

B- Absences from exams and handing in assignments on time:

Make-up appeals are considered only for students who provide documentation of a compelling reason for missing the exam.

C- Health and safety procedures:

college Members and students must at all times, conform to Health and Safety rules and procedures.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom. Students violate this policy would be subjected to disciplinary action according to University of Jordan disciplinary policies

E- Grading policy:

Grade-point average according to grading policy at University of Jordan

F- Available university services that support achievement in the course:

Internet database at the University of Jordan
The University of Jordan library

24. Required equipment:

Electronic computer laboratory

25. References:

Required book (s), assigned reading and audio-visuals:

Junqueira's Basic Histology, Text and Atlas, 14th edition, By Anthony L. Mescher

Recommended books, materials, and media:

Color Textbook of Histology, 4th edition, by [Leslie P. Gartner and James L. Hiatt](#).

Web based resources: <http://www.histologyguide.org/index.html>

26. Additional information:

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Name of Course Coordinator: -----Signature: -----

Date: ----- Head of curriculum committee/Department: -----

----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

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Assistant Dean for Quality
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