Course Syllabus

A. COURSE INFORMATION AND TEACHING STAFF

1. Course	Name	HISTOLOGY
	Code	200241210
	Activity	Lecture
	Credit hours	2
	Semester	Spring 2023/2024
	Pre-requisite	No Pre-Requisite

2. Teaching staff, time and location	Section	Building	Room	Day	Time	Instructor	Office hours
	3	MS	207	Th	10:00-10:50 11:00-11:50	Dr.Sundus Fahoum Issa Shalabi Sundus.Shalabi@aaup.edu	MTW 14:00 - 14:50

B. COURSE POLICIES

1. Commitment and Attendance

Attendance is required; and university regulations in this regard are strictly applied. It is important to note the following:

1. The student is expected to follow all announcements issued by the university, faculty, department as well as the course instructor through the official channels. It is the student's full responsibility to get aware of these announcements and to react accordingly.
2. The student has to communicate electronically with the course instructor, whenever needed, through the official channels exclusively which are limited to the AAUP email and Moodle messages only.
3. The student is expected to attend all classes* and to arrive at classroom on time.
4. If the instructor is late for class, the student must wait for at least 10 minutes before leaving the classroom.
5. Absence by more than 25% of classes leads to an automatic withdrawal from the course (the grade W is assigned).

2. Performance of assessment activities

The student must perform all course assessment activities, i.e. assignments, quizzes, exams etc. It is important to note the following:

1. Absence from an exam or a quiz other than the final exam leads to a zero mark in that exam or quiz. An exception allowing a makeup is made for a student submitting a legitimate excuse that is accepted by the instructor in a timely manner.
2. Absence from the final exam leads to an FA grade that eventually turns to an F grade. An exception allowing a makeup exam is made if the student submits an official excuse that is accepted by the Academic Affairs in compliance with the university regulations.

Course Syllabus

3. Academic Integrity	The student is expected to be honest during the performance of assessment activities. While not limited to the list below, the following actions are examples of cheating: 1. Copying from other students. 2. Using materials that are not authorized by the proctor during quizzes or exams. 3. Collaborating with other students during quizzes or exams. 4. Stealing or buying the content of exams, quizzes, and assignments. 5. Stealing ideas and work of others and presenting them as that of the student	
4. Grading	The university uses the letter grading system. It is important to note the following: 1. The passing grade is D, and the corresponding score (out of 100) is determined at the end of the semester. 2. At the end of the semester, the scale of scores is determined by converting each	
5. Learning and teaching methods	Lectures	Class sessions involve lectures, video shows, case studies, discussions, debates, and power-point presentations on topics and current issues related to the course contents.
	Readings	This must be a key responsibility to each student. Students should read the relevant parts of the textbook and other materials before class. They should be prepared to raise questions and to get engaged in arguments on related topics in the class schedule.
	In class learning activities	Students are encouraged to learn actively individually and cooperatively in groups. Students are expected to engage with the material, participate in the class, and collaborate with each other. Students will be asked to analyze an argument, demonstrate role play, discuss case studies, make presentations, or apply a concept to a real-world situation.
	Outside class learning activities	The course instructor assigns projects and home assignments to students individually or in groups.
	Feedback	The instructor provides the students with feedbacks on their performance throughout the course, which can help them to realize their weaknesses and work harder to improve their performance.
	Online learning	Online learning platforms are utilized to provide students with additional resources as well as a continuous access to the course material beyond the classroom.

C. COURSE DETAILS

1. Course description & purpose	Histology is a discipline which examines the structure and correlating functions of tissues and cells using light microscopy, electron microscopy and other specialized microscopic methods. This course will involve a study of general tissue characteristics and will explore histologically and ultrastructurally the different tissue types in the body including: epithelial, connective, skeletal, muscular, neurological tissues as well as some organ systems including cardiovascular, blood, lymphoid and integumentary (skin) tissues. While the course's emphasis will be a study of the appearance of normal cells and tissues, selected abnormal/diseased tissues will be examined as well (e.g., bone osteoporosis) and functional correlations will be made.

Course Syllabus

2. Course learning outcomes (CLOs)		**Upon the completion of the course, students will be able to achieve the following learning outcomes:**
	CLO1	Understand the basic concepts of tissue slides preparation, types of microscopes and other histo-techniques used for histological examination.
	CLO2	Recognize identify and describe the characteristic structures of cells, tissues and organ systems of the body at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level
	CLO3	Detail the basic functions of cells and cellular organelles, tissues and organ systems of the body as correlated with their histological structures
	CLO4	Contrast understand the characteristics of the basic tissue types of the body (epithelium, connective, muscle, nerve).
	CLO5	Summarize how the basic tissues combine and relate to form organs in various body systems, which operate together to maintain homeostasis
	CLO6	Identify and understand the histological features of selected tissues/organ systems resulting from disease processes (e.g. osteoporosis).
	CLO7	Incorporate communication skills by effective interaction with peers and academic staff

3. Assessments	Assessment tool	Weight %	CLOs	Due week
	Quiz	**20%**	1,2,3	
	Mid. Term	**30%**	1,2,3,4,5,6,7	8
	Final Exam	**50%**	1,2,3,4,5,6,7	16
	Total	**100%**		

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4. CLOs assessment	Outcomes	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5	CLO 6	CLO 7
	1 - Quiz	✓	✓	✓				
	2 - Mid. Term	✓	✓	✓	✓	✓	✓	✓
	3 - Final Exam	✓	✓	✓	✓	✓	✓	✓

Course Syllabus

	Week	Topics	Study material	Assignment	CLOs
5. Course schedule	1	***Histology & Its Methods of Study:*** • Introduction• Preparation of Tissues for Study• Light Microscopy• Electron Microscopy• Autoradiography• Enzyme Histochemistry• Visualizing Specific Molecules	Junqueira Basic Histology, Chapter: 1		1
	2	***The Cytoplasm and the Nucleus (Review)***	Junqueira Basic Histology, Chapters: 2+3		2,3
	3	***Epithelial Tissue*** • Characteristic Features of Epithelial Cells• Specializations of the Apical Cell Surface• Types of Epithelia• Transport Across Epithelia• Renewal of Epithelial Cells	Junqueira Basic Histology, Chapter: 4		2,3,4,6, 7
	4	***Epithelial Tissue*** • Characteristic Features of Epithelial Cells• Specializations of the Apical Cell Surface• Types of Epithelia• Transport Across Epithelia• Renewal of Epithelial Cells	Junqueira Basic Histology, Chapter: 4		2,3,4,6, 7
	5	***Connective Tissue*** • Cells of Connective Tissue• Fibers• Ground Substance• Types of Connective Tissue	Junqueira Basic Histology, Chapter: 5		2,3,4,6, 7
	6	***Connective Tissue*** • Cells of Connective Tissue• Fibers• Ground Substance• Types of Connective Tissue	Junqueira Basic Histology, Chapter: 5		1,2,3,4, 6,7
	7	***Adipose Tissue*** • White Adipose Tissue• Brown Adipose Tissue	Junqueira Basic Histology, Chapter: 6		2,3,4,6, 7
	8	***Cartilage*** • Hyaline Cartilage• Elastic Cartilage• Fibrocartilage• Cartilage Formation, Growth, & Repair	Junqueira Basic Histology, Chapter: 7		2,3,4,6, 7
	8	Mid. Term			
	9	***Bone*** • Bone Cells• Bone Matrix• Periosteum & Endosteum• Types of Bone• Osteogenesis• Bone Remodeling & Repair• Metabolic Role of Bone• Joints	Junqueira Basic Histology, Chapter: 8		2,3,4,5, 6,7

Course Syllabus

	Week	Topics	Study material	Assignment	CLOs
5. Course schedule	10	***Nerve Tissue & the Nervous System*** • Development of Nerve Tissue• Neurons• Glial Cells & Neuronal Activity• Central Nervous System• Peripheral Nervous System• Neural Plasticity & Regeneration	Chapter: 9		2,3,4,6, 7
	11	***Muscle Tissue*** • Skeletal Muscle• Cardiac Muscle• Smooth Muscle• Regeneration of Muscle Tissue	Junqueira Basic Histology, Chapter: 10		2,3,4,6, 7
	12	***The Circulatory System*** • Heart• Tissues of the Vascular Wall• Vasculature• Lymphatic Vascular System	Junqueira Basic Histology, Chapter: 11		2,3,5,6, 7
	13	***Blood and Hemopoiesis*** • Composition of Plasma• Blood Cells• Stem Cells, Growth Factors, Differentiation• Bone Marrow• Maturation of Erythrocytes• Maturation of Granulocytes• Maturation of Agranulocytes• Origin of Platelets	Junqueira Basic Histology, Chapter: 12+13		2,3,5,6, 7
	14	***The Immune System & Lymphoid Organs*** • Innate & Adaptive Immunity• Cytokines• Antigens & Antibodies• Antigen Presentation• Cells of Adaptive Immunity• Thymus• Mucosa-Associated Lymphoid Tissue• Lymph Nodes• Spleen	Junqueira Basic Histology, Chapter: 14		2,3,5,6, 7
	15	***Skin*** • Epidermis• Dermis• Subcutaneous Tissue• Sensory Receptors• Hair• Nails• Skin Glands• Skin Repair	Junqueira Basic Histology, Chapter: 18,		2,3,5,6, 7
	16	Revision			1,2,3,4, 5,6,7
	16	Final Exam			

Course Syllabus

D. COURSE MATERIAL	
1. Textbook	**Junqueira's Basic Histology (Text and Atlas),** Last Edition. By Anthony L. Mescher. McGraw-Hill Education.
2. Reference material	Color Atlas and Text of Histology, Last Edition, by Leslie P. Gartner PhD. Wolters KluwerJournal of Histology & Histopathology.
3. Internet resources	• http://www.histology-world.com/ • http://www.histologyguide.com/ • https://vmicro.iusm.iu.edu/hs_vm/toc.htm