

Introduction to Anatomical sciences (General histology and embryology) course plan

Semester: Second	Year: 2024-2025
MD and MBBS Program Course Syllabus	
Course Title: Introduction to Anatomy (General histology and embryology)	Department: Department of Anatomical Sciences
Course Code: 1234019	Instructor: Dr. Hossein Salehi
Location of teaching the course:	Credit Hours: 38.30 Hours (Theo)/8.5 Hours (Prac)
Prerequisite: none	Credit Units: 2.5 (2.25 Theo. and 0.25 Prac.)
Office address: Faculty of Medicine, Department of Anatomical Sciences	
Tel: 031-37929157	Email: ho_salehi@med.mui.ac.ir
Number of students : 25	
Brief course description: This course is designed to deliver information to first year medical students in which is an introduction to human body tissues (General histology) and embryo development (general embryology)	
Learning outcomes: On satisfying the requirements of this course, students will have the knowledge and skills to: <ol style="list-style-type: none"> 1. Recognize the cell structure and components 2. Identify and describe the major histological structures of epithelial tissue. 3. Discuss the histological structural of connective tissue and its components. 4- Describe the major histological structures of cartilage and bone tissues. 5- Identify and describe the major histological structures of muscular and nervous tissue. 6- Describe the structure and function of blood cells. 7- Describe the tissues comprising the major layers of the Integumentary system. 8- Explain the process of gametogenesis. 9- Describe the fertilization phases and cleavage. 10- Explain the process of blastocyst formation, implantation and the second week of embryonic development. 11- Discuss the gastrulation process and notochord formation. 12- Describe the embryonic period and the derivatives of three germ layers. 13- Describe the fetus period, the formation of the placenta, its structure, the umbilical cord, and the types of twins. 	
References (Text books): 1- Histology textbook: Basic histology: Text & Atlas By: Junqueira, LS & Carneiro, J (preferably the latest edition). 2- Embryology Textbook: Langman's Medical Embryology	

By: T. W. Sadler (preferably the latest edition)

ASSESSMENT TOOLS

(The assessment tools that will be used to test students ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS	From 20
Mid Exam (Theory)	8
Final Exam	9
Practical	2
Class activities	1
TOTAL MARKS	20

Students responsibilities:

- 1- Prepare for the class in advance
- 2- Break down every system into its basic components.
- 3- Use the lectures outline (PowerPoint presentations) and handouts (if any) as a guideline for your study.
- 4- Study the course components using the required book, atlas and the websites.
- 5- Reconstruct the system so that it is functional and understandable.
- 6- Students are expected to spend 2-3 hours studying for each hour in class.
- 7-By now the students are expected to end up with an understanding of the subject.
- 8-The students' understanding will be evaluated and given a grade using MCQs and/or any form of evaluation.

ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class.

1. Absence of one session will result in a first written warning. Absence of two sessions or more will result in a 0.25 point deduction on the final score for each session.
2. Absence of more than three session will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

In laboratory, lab coats are mandatory, no student will be allowed in the lab without a clean lab coat. Students are expected to act in a civil manner and respect the rights and opinions of other students and the instructor. Student/Instructor interaction is a function of the learning experience and should be approached in a manner conducive to the learning process.

Use of Mobile Devices, Laptops, etc. During Class, unexpected noises and movement automatically divert and capture people's attention, which means you are affecting everyone's learning experience if your cell phone, laptop, etc. makes noise or is visually distracting during class. For this reason, students are required to turn off their mobile devices and close their laptops during class.

Department's Attitudes

Ethics, Critical thinking, hard work and discipline:

Examination attitudes Any evidence of cheating on a test will result in the student receiving (0 mark) for the test and will be announced through the lectures so all the students will be informed.

The instructor will be the final authority on whether cheating has occurred.

Cellular phones and notebooks are band and disruptive and are not allowed during the exam periods because they mean an act of cheating, therefore students are advised to enter the exams without them.

Mid exam date:

Final exam date:

COURSE SYLLABUS

	Chapter	Page	Course topics	Time (Hour)	Date
Self-study	2-3	17-70	Cell and it's organelles	2	
	4	72-90	Epithelial Tissue	2	21/04/2025
	5	96-114	Connective Tissue	2	23/04/2025
	5- 7	114-134	Adipose tissue and cartilage tissue	2	05/05/2025
	8	138-158	Bone tissue	2	07/05/2025
	9	161-190	Nerve Tissue & the Nervous System	2	19/05/2025
	10	193-213	Muscle Tissue I	2	21/05/2025
	10	193-213	Muscle Tissue II	2	02/06/2025
	12-13	237-265	Blood and hematopoiesis	2	04/06/2025
	18	372-389	Skin I	2	16/06/2025
	18	372-389	Skin II	2	18/06/2025
	2	14-33	Gametogenesis: Conversion of Germ Cells into Male and Female Gametes	2	23/06/2025
	3	34-49	First Week of Development: Ovulation to Implantation	2	25/06/2025
	4	50-58	Second Week of Development: Bilaminar Germ Disc	2	07/07/2025

	5	59-71	Third Week of Development: Trilaminar Germ Disc	2	09/07/2025
	5-6	65-80	Third Week of Development: Trilaminar Germ Disc Third to Eighth Weeks: The Embryonic Period	2	21/07/2025
	6	80-95	Third to Eighth Weeks: The Embryonic Period	2	04/08/2025
	8	106-127	Third Month to Birth: The Fetus and Placenta	2	Will be announced

Practical Histology

	Slides	Course topics	Time (Hour)	Date
	-	Understanding tissue preparation equipment and steps	2	1 st Week
	Liver, skin, esophagus	Epithelium and connective tissues	2	2 nd Week
	Cartilage, Ground compact bone, Decalcification compact bone, Spongy bone	Cartilage and bone	2	3 rd Week
	Striated muscle, Cardiac muscle, Smooth muscle (uterus myometrium)	Muscular tissue	2	4 th Week
	Autonomic Ganglion, Blood, Skin	Nervous, Blood, Skin tissues	2	5 th Week