Dentistry -- COMMITTEE-4/*10 weeks*

COURSE TITLE	COURSE CODE	SEMESTER	THEORETICAL (hours / week)	PRACTICE (hours / week)	CREDIT	ECTS
COMMITTEE-4 BIOLOGICAL ORGANIZATION	DIS 121	2	6	3	7	7

COURSE LEVEL	☐ Associate's ☑ Bachelor's Degree ☐ Master's Degree ☐ PhD
INSTRUCTION LANGUAGE	☑ TURKISH ☐ FOREIGN LANGUAGE ☐ English ☐ German ☐ French
COURSE TYPE	☑ COMPULSORY ☐ ELECTIVE ☐ DEPARTMENTAL ELE ☐ NON-DEPARTMENTA
PREREQUISITE OF COURSE	NONE
PURPOSE OF COURSE	To understand the transition to histological tissue organization within biological organization after biological regulation, classification of tissues and macro anatomy. To comprehend the laws of movement of biophysics within the organization related to movement. To know the chemistry of macromolecules that make up tissues. To understand physiology related to tissue stimulation.
COURSE OBJECTIVES	To know intracellular traffic and signals. To comprehend the organization formed by cytoskeleton and adhesion molecules. To identify histological and chemical elements of tissues. To get information about physiology. To associate it with the laws of physics. To understand the effects of mutagens, characteristics of cell aging. To understand molecular controls in the cell cycle.
TEACHING METHOD	FACE-TO-FACE
LEARNING, TEACHING METHODS OF THE COURSE	☐ Question-and-Answer ☑ Case Problem Solving/ Drama- Role/ Case Management ☑ Laboratory ☐ Quantitative Problem Solving ☐ Fieldwork ☑ Group Study / Assignment ☑ Individual Assignment ☑ Web-Based Learning ☐ Internship ☐ Practice in Field ☑ Project Preparation ☐ Report Writing ☐ Seminar ☐ Supervision ☐ Social Activity ☐ Occupational Activity ☐ Occupational Trip ☐ Application (Modelling, Design, Model, Simulation, Experiment et.) ☑ Reading ☐ Thesis Preparation ☐ Field Study ☐ Student Club and Council Activities

COURSE COORDINATOR (S)	Lecturer Sercan Doğukan Yıldız (Anatomy) Prof. Dr. H. Yegane Güven (Biochemistry) Asst. Prof. Merve Beker (Medical Biology) Prof. Dr. Tangül Müdok -- Asst. Prof. Türkan Sarıoğlu (Histology and Embryology) Asst. Prof. Hasan Hüseyin Şahin (Physiology)Lecturer Cevdet Nacar (Biophysics)					
COMMITTEE-4 Biological Organization Course Topics 10 weeks	ANATOMY	BIOCHEMISTRY	MEDICAL BIOL.	HISTOLOGY-EMB.	PHYSIOLOGY	Biophysics
		Carbohydrates and their biological importance	Cell signal transduction 1: signal transduction and short-term cellular responses	Connective Tissue 1		
		Glycosaminoglycans-Proteoglycans	Cell signal transduction-2 :signaling pathways that control gene activity	Connective Tissue 2		
		Amino acids and proteins	Adhesion molecules	Epithelial Tissue		
	Bones of the Skull and Vertebral Column	Biochemistry of Connective Tissue	Cytoskeletal proteins	Glandular Epithelium		
	Bones of the upper limb	Bone Biochemistry	Intracellular Protein Traffic, Protein Destruction (Proteasome Chaperone)	Cartilage Tissue		
	Joints of the upper limb		Mutagenic effects	Bone Tissue		
	Bones of the lower limb		Cell aging: apoptosis, necrosis mechanism	Hematopoiesis	Hematopoietic Sys.	
	Joints of the lower limb			Nerve Tissue	Excitable Tissues and Action Potential	
	Muscles of the lower limb		Cell Cycle - Cell Division - Meiosis-Mitosis	* Muscle Tissue * Cardiac Muscle	Muscle Physiology	Laws of Motion
			Cell Cycle - Checkpoints-Cyclins	Gametogenesis		

LEARNING OUTCOMES

INFORMATION
(Organized according to theoretical and / or factual information classification)

1. Students know the signal mechanisms in the cell.
2. Students know the molecules of intercellular interconnection.
3. Students know histological tissue organization, and macroanatomy related to movement.
4. Students comprehend the effects of physiological stimulation and its relations with the laws of physics.
5. Students know bioelectrical potentials.
6. Students know the working mechanisms of the hematopoietic system.

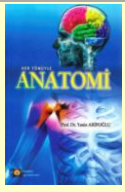
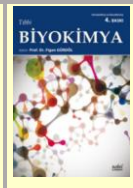
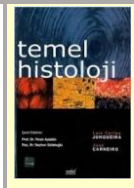
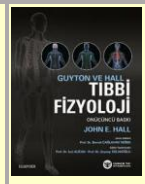
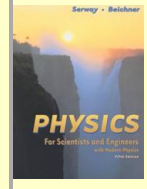
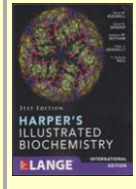
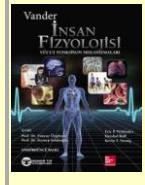
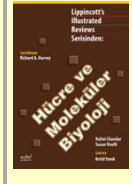
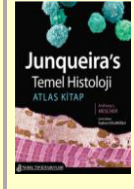
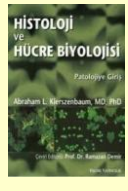
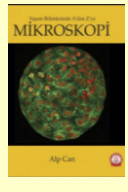
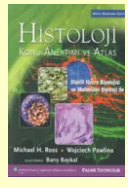
SKILL
(As cognitive and / or practice skills)

1. Students can list bones of the skull and limb joints and bones.
2. Students know basic histological tissues.

COMPETENCY

1. Students demonstrate responsibility and self-discipline.
2. Students are productive and questioning.
3. Students speak their mother tongue effectively, strive to speak a foreign language.
4. Students can work independently and take responsibility.

RESOURCES USED

ANATOMY	BIOCHEMISTRY	MEDICAL BIOL.	HISTOLOGY-EMB.	PHYSIOLOGY	Biophysics
					
					
					
					
					
					

EVALUATION SYSTEM

YEAR / SEMESTER STUDIES	Number	CONTRIBUTIONS %
Attendance / Participation		%
Laboratory		%
Practice		%
Practice Exam		%
Quiz		%
Assignment		%
Presentation		%
Projects		%
Course-Specific Internship		%
Fieldwork		%
Article Critique		%
Article Writing		%
Module Group Study		%
Brainstorming		%
Role Playing + Dramatizing		%
Studying outside of the Classroom		%
Preparatory Work, Enhancement, Practice Repetition etc.		%
Homework (reading, writing, watching movies		%
Project Preparation + Presentation		%
Report Preparation + Presentation		%
Presentation / Seminar Preparation +		%
Oral Exam		%
MIDTERM		40%
FINAL		60%
	TOTAL	%100

COURSE ECTS

European Credit Transfer System
- Student Workload-

Activities	Number (week)	Duration (hour)	Total Work Load
Course Duration	*10*	*9*	*90*
Laboratory	*10*	*3*	*30*
Practice	*0*	*0*	*0*
Practice Exam	*0*	*0*	*0*
Course-Specific Internship	*0*	*0*	*0*
Fieldwork	*0*	*0*	*0*
Article Critique	*0*	*0*	*0*
Article Writing	*0*	*0*	*0*
Module Group Study	*0*	*0*	*0*
Brainstorming	*0*	*0*	*0*
Role Playing + Dramatizing	*0*	*0*	*0*
Studying outside of the ClassroomPreparatory Work, Enhancement, Practice Repetition etc.)	*10*	*4*	*40*
Homework (reading, writing, watching movies et	*0*	*0*	*0*
Project Preparation + Presentation	*0*	*0*	*0*
Report Preparation + Presentation	*0*	*0*	*0*
Presentation / Seminar Preparation + Presentatic	*0*	*0*	*0*
Oral Exam	*0*	*0*	*0*
Preparation For Midterms	*7*	*2*	*14*
MIDTERM	*1*	*1*	*1*
Preparation For Finals	*14*	*4*	*56*
FINAL	*1*	*1*	*1*
Total ECTS 30 hours = 1 ECTS			*232* *ECTS* *7*