# TOROS ÜNIVERSITESI

Vocational School Medical Imaging Techniques

### **Course Information**

MEDICAL BIOLOGY					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
TGT109	Fall	2 0		2	3

Prerequisites and co- requisites	
Language of instruction	Turkish
Туре	Required
Level of Course	Associate
Lecturer	Lec. Harika TOPAL ÖNAL
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise ( internship )	None
Objectives of the Course	to learn the physical and chemical structure of organelles and cell property, basic genetic mechanisms, DNA, chromosome structure.
Contents of the Course	Structure of the cell, cell metabolism and its anomalies, embryonic development in human, medically important prokaryotic and eukaryotic species, tissues and organ systems

# **Learning Outcomes of Course**

#	Learning Outcomes
1	Understands the general characteristics of the cell.
2	Sorts links to relations to the cell with environment
3	Defines the structure of DNA and chromosome by using the basic genetic concepts
4	Understands Basic Genetic Mechanisms
5	Sort the differences between the structure of DNA and RNA.

### **Course Syllabus**

#	Subjects	Teaching Methods and Technics
1	Description of biology and beginning of the life	Presentation, Discussion, question-answer
2	Cell Science	Presentation, Discussion, question-answer
3	Cytoplasm	Presentation, Discussion, question-answer
4	Nucleus	Presentation, Discussion, question-answer
5	Physical structure of the cell, and Transport Events in the cell membrane	Presentation, Discussion, question-answer
6	Chemical structure of the cell	Presentation, Discussion, question-answer
7	Cell Metabolism	Presentation, Discussion, question-answer
8	Mid term exam	written examination
9	Cell Metabolism	Presentation, Discussion, question-answer
10	Cell Signaling Systems	Presentation, Discussion, question-answer
11	Cell Division and Cellular Aging	Presentation, Discussion, question-answer

12	Basic genetic mechanisms: DNA replication and repair	Presentation, Discussion, question-answer
13	Basic genetic mechanisms: DNA replication and repair	Presentation, Discussion, question-answer
14	Apoptosis and necrosis	Presentation, Discussion, question-answer
15	Apoptosis and necrosis	Presentation, Discussion, question-answer
16	Final Exam	Written examination

# **Course Syllabus**

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Tıbbi Biyoloji. Başaran A. 1999. Motif Matbaacılık.,İstanbul		
2	Medical Cell Biology: Made Memorable. 1st Eds.		

#### **Method of Assessment**

#	Weight	Work Type	Work Title	
1	40%	Mid-Term Exam	Mid-Term Exam	
2	60%	Final Exam	Final Exam	

# Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Understands the general characteristics of the cell.	8	1,2
2	Sorts links to relations to the cell with environment	10	1,2
3	Defines the structure of DNA and chromosome by using the basic genetic concepts	2	1,2
4	Understands Basic Genetic Mechanisms	6	1,2
5	Sort the differences between the structure of DNA and RNA.	6	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

#### **Work Load Details**

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	0	0	0
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	2	5	10
5	Document/Information Listing	3	5	15
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	5	5
8	Midterm Exam	0	0	0
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	2	2
16	Final Exam	0	0	0
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