

MUTATIONS AND MUTAGENIC AGENTS

1	Course Title:	MUTATIONS AND MUTAGENIC AGENTS
2	Course Code:	TTB 5003
3	Type of Course:	Compulsory
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Berrin Tunca
15	Course Lecturers:	Prof. Dr. Ünal EGELİ Doç. Dr. Gülşah ÇEÇENER
16	Contact information of the Course Coordinator:	btunca@uludag.edu.tr 0224 295 41 61 ULUDAĞ ÜNİVERSİTESİ TIP FAKÜLTESİ TIBBİ BİYOLOJİ ANABİLİM DALI
17	Website:	
18	Objective of the Course:	Learning basic concepts of mutations and mutagenic factors, learning types of mutations and mechanism of their formation and linking between other subjects, making clinical approach possible and easier.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Understanding basic concepts of mutations and mutagenic factors.
	2	Understanding the molecular alterations in the cell and linking to related diseases.
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Description of mutations.	

2	Concept of genome, cromosome and gene mutations	
3	Description of somatic and germline mutations	
4	Biogenesis of mutations	
5	Hot-spot mutations	
6	Non-sense mutations	
7	Miss-sense mutations	
8	Silent mutations	
9	Frameshift mutations	
10	Promoter mutations	
11	Exemplify the effects of mutations to phenotype	
12	Data bases of mutations	
13	Spontane and induced mutations	
14	Mutagenic factors	

22	Textbooks, References and/or Other Materials:	Thompson and Thompson Medical Genetic Molecular Biology of the Cell, Alberts, Garland Science Molecular Cell Biology, Lodish, WH Freeman and Company The Cell: A molecular Approach , Geoffrey M. Copper
23	Assesment	

Activites		Number	Duration (hour)	Total Work Load (hour)
Quiz	0	0.00		
Theoretical	14	2.00	28.00	
Practicals/Labs	0	0.00	0.00	
Self study and preperation	14	4.00	56.00	
Homeworks	8	10.00	80.00	
Contribution of Term (Year) Learning Activities to Projects	0	0.00	0.00	
Field Studies	0	0.00	0.00	
Contribution of Final Exam to Success Grade	0	0.00	0.00	
Midterm exams	0	0.00	0.00	
Others	14	1.00	14.00	
Measurement and Evaluation Techniques Used in the Final Exams	1	2.00	2.00	
Total Work Load			180.00	
Total work load/ 30 hr			6.00	
ECTS Credit of the Course			6.00	

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	5	0	0	0	3	0	0	0	3	0	0	0	0	0	0
ÖK2	5	5	0	0	0	3	0	0	0	3	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							