MOLECULAR CELL BIOLOGY

1	Course Title:	MOLECULAR CELL BIOLOGY
2	Course Code:	TTB6001
3	Type of Course:	Compulsory
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	3.00
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. ÜNAL EGELİ
15	Course Lecturers:	Prof. Dr. Berrin TUNCA Doç.Dr.Gülşah ÇEÇENER
16	Contact information of the Course Coordinator:	egeli@uludag.edu.tr 0224 295 41 51 ULUDAĞ ÜNİVERSİTESİ TIP FAKÜLTESİ TIBBİ BİYOLOJİ ANABİLİM DALI
17	Website:	
18	Objective of the Course:	Learning basic consepts of molecular content of cell, structure and function of organels 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 consepts of cell biology.
	2	Recognizing cell organels and understanding their functional relationship.
	3	Understanding the molecular alterations in the cell and linking to related diseases.
	4	
	5	
	6	
	7	
	8	
	9	
	10	

21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Cell Structure	
2	Molecular structure of cell membrane	

3	Molecular structure of cell skeleton and functions	
4	Molecular structure of endoplasmic reticulum and golgi	
5	Molecular structure of ribosomes	
6	Molecular structure of lysosomes	
7	Synthesis of lysosome enzymes	
8	Synthesis of proteins which are exporting out of the cell	
9	Mitochondria, mitochondrial DNA and cytoplasmic heredity	
10	Molecular structure of nucleus and biogenesis of chromosomes	
11	Transporting mechanisms of proteins which will use in mitochondria and nucleus	
12	Cell cycle and control mechanisms	
13	Molecular structure of mitosis	
14	Molecular structure of meiosis, genetic structure of sperm and ovum, and fertilization	

22	Textbooks, References and/or Other Materials:	Molecular Biology of the Cell, Alberts, Garland Science Molecular Cell Biology, Lodish, WH Freeman and Company

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	4.00	56.00
Homeworks	5	9.00	45.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	1	5.00	5.00
Final Exams	1	2.00	2.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Quiz	0	0.00
Final Exam	1	100.00
Contribution of Term (Year) Learning Activities to		0.00
Contribution of Final Exam to Success Grade		100.00
Measurement and Evaluation Techniques Used in the		

24	**ECTS / WORK LOAD TABLE**

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	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	5	0	0	0	3	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High