

Course Name	Code	Semester	Theoric (hours/week)	Practice (hours/week)	Labratory (hours/week)	AKTS
INTRODUCTION TO MOLECULAR MEDICINE	MTP 501	1.Semester/ Fall	3	0	0	5
Conditions	-					
Language	Turkish					
Type	Compulsory					
Teaching Methods	Interactively, Slide Presentation, If necessary,accessing data sources via internet					
Lecturer(s)						
Course Objectives	It is expected to gain nucleic acid structure, DNA, RNA and protein synthesis, structure and function of human genome, new approaches on genome knowledge, genome in the future, transmission of human genetic diseases, chromosomes, mitosis, meiosis, phenotypes, genotypes, mutation, polymorphisms, genetic heterogeneity, classification of genetic diseases, Mendelian and monogenetic diseases, autosomal dominant diseases, autosomal recessive diseases, X and Y-linked diseases, trinucleotide repeats, mosaicism, introduction to multifactorial diseases, mitochondrial inheritance, screening of genetic diseases, clinical approach to molecular diagnosis tests, cell cycle, cancer genetics					
Course Learning Outcomes	1) Students could interpret the information about multidisciplinary area especially in medical science including biology, chemistry, mathematics, statistics and follow the developments of all the area. 2) The way of advancing technology, Students could hypothesis about treatment via using the technics of patient oriented classical medicine and molecular biology on the molecular basics of patients and integrated familial genetics history and are able to correlate the links.					
References	Dennis Ross,Introduction to Molecular Medicine Springer, 2002,ISBN 0387953728					

#### Topics of Weeks:

Weeks	Topics
1. Week	Structure of nucleic acids
2. Week	Synthesis of DNA, RNA and proteins
3. Week	Function and regulation of human genome
4. Week	Novel approach to genome
5. Week	Physical damage
6. Week	Genome in future
7. Week	Transmission of genetic disorders
8. Week	Chromosomes
9. Week	Mitosis, meiosis, phenotype, genotype, mutation, polymorphism, genetic heterogeneity
10. Week	Classification of genetic disorders
11. Week	Multifactorial diseases
12. Week	Diagnosis of genetic disorders, mitochondrial heredity
13. Week	Cell cycle and cancer genetics
14. Week	Structure of nucleic acids

**Student Workload Table**

Activities	Number	Duration	Total work load
Course Duration (X14 )	14	3	42
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	3	42
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	2	10	20
Final Exam Preparation Time	1	7	7
<b>Total Work Load ( hour) / 25(s)</b>	<b>125/25=5</b>		
<b>ECTS</b>	<b>5</b>		

**Evaluation System**

	The number of	Contribution
Semester Work		
Midterm Exam	1	%50
Half Year End Exam	1	60%
Laboratory		
Application		
Field Work		
Class-Specific Internship (If Any)		
Assignments		
Presentations and Seminars		
Projects		
Other		
Do your homework		
Application		
Laboratory		
<b>The sum of the grades</b>	<b>100</b>	

**COURSE LEARNING OUTCOMES AND A RELATIONSHIP WITH PROGRAM QUALIFICATIONS**

No.	PROGRAM QUALIFICATIONS	LO1	LO2	LO3
1	Degree level qualification at the level of expertise in the field of molecular medicine based on up-to-date information, enhances and deepens.	4	3	3
2	Requires a level of knowledge of the field of molecular medicine technologies, technical equipment and machinery and tools that are specific to the field information	3	3	4
3	Molecular Medicine is having in the field of information integrate with information from different disciplines to create new information, comments, analysis and synthesis by using different research methods and propose solutions.	5	4	3
4	The report of his research the author.	3	2	3
5	Empirical research plans.	3	4	3
6	Molecular Medicine in matters requiring expertise in the field of fiction, propose solutions, and solves the problems, assesses the results obtained when necessary.	3	3	3
7	Molecular Medicine and public health-related priority issues Area scientific clinical and/or descriptive research/presentations/publication.	3	3	2
8	The information related to the field of molecular medicine evaluates and directs the learning a critical approach.	5	4	4
9	Professional development related to the field of molecular medicine and performs studies the principles of life-long learning.	4	4	3
10	Current developments in the field of Molecular Medicine information, and their work in the same field or with groups other than the written, oral and Visual systematically as he discusses and shares.	2	3	5
11	The vocational and professional environment, social relationships, and those relationships are a critical perspective, norms and makes the need to improve them.	5	4	3
12	Collection of data related to the field of molecular medicine, towards restriction, interpretation, announcing social, scientific and ethic values in oversees and teaches these values.	3	3	3
13	The basic unit of society, current developments in the field of Molecular Medicine is to cover the national children and family values, and evaluates in line with the realities of the country.	5	4	5
14	Ethical principles and the importance of the individual and of the community for the Ethics Committee, ethics.	4	4	3
15	Molecular Medicine in the field with strategy, policy and implementation plans and results obtained within the framework of the quality processes.	4	2	3
Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent				