Course Name	Code	Half term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
DISEASE-MOLECULAR ASPECTS, INDIVIDUAL-SPECIFIC TREATMENT	MTP 515	1. semester/Spring	3	0	0	5
Prerequisites	None					
Course language	Turkish					
Course Type	Elective					
Teaching Methods	Interactively, Slide Presentation, If necessary,accessing data sources via internet					
Instructor(s)	Assist.Prof. Dr. Necla Benlier					
Course objectives	It is expected to gain homogenization methods for cellular energy sources, texture, santrifugation and cellular bioenergetics, mitochondria of fractions inside events, isolation of various subsellular fractions, Hexokinase and glucokinase enzymes, glycogen synthesis and degradation, pentose phosphate way, glucuronic way, respiratory chain of oxidative phosphorylation, fatty acid oxidation fatty acid synthesis, identification of various subsellular fractions, and their methods : Drug Metabolism polymorphisms Single nucleotide and drug basics, metabolizmas, Pharmacodynamic , Transport proteins, polymorphisms, that affect the Transport proteins and polymorphism, pharmacogenomic and the importance of drug development, "Pharmacovigilance", molecular techniques, pharmacogenetics and pharmacogenomics					
Course learning outcomes	1. The basic unit of society, the current developments to include children and family with national values and to be able to evaluate in accordance with the realities of the country 2. Information with information from different disciplines to create new information, interpret, integrate different research methods using any analysis and synthesis and solution recommendations					
Resources	1- Good & Gilman's The Pharmacological Basis of Therapeutics, 2012 2- Rang and Dale s Pharmacology, 7th. Edition 2011 3- Hotbed Chemistry, Gareth Thomas, 2nd. Edition 2007 4- Basic and Clinical Pharmacology. B. katzung. Appleton & Lange. 11th ed. 2007. 5- The Cell: A Molecular Approach, Geoffrey m. Cooper and Robert e. Hausman-, 5th Edition, 2009 6- Pharmacology primary, 3rd ed./Terry Kenakin. 2009. 7- Pharmacology: Principles and Practice. Bachmann, Kenneth a. Elsevier/Academic Press, 2009 8- Rational treatment of Medical Pharmacology terms. S. Khalafawyes's. Pelican Publishing. 1 Edition, 2012					

Weekly Course Topics:

Weeks	DISCUSSION TOPICS TO BE PROCESSED
1. Week	Definition of Pharmacokinetic and Pharmacodinamic
2. Week	Bioenergetics events inside mitochondria
3. Week	Identification of various subsellular fractions, and their methods
4. Week	Hexokinase and glucokinase enzymes Glycogen synthesis and degradation
5. Week	Pentose phosphate path
6. Week	Glucuronik road, respiratory chain of oxidative phosphorylation, fatty acid oxidation, fatty acid synthesis
7. Week	Drug metabolism basics

8. Week	Single nucleotide polymorphisms that affect drug metabolism polymorphisms and
9. Week	Transport proteins and polymorphism
10. Week	The importance of Pharmacogenomic and drug development
11. Week	Molecular techniques, pharmacogenetics and pharmacogenomics
12. Week	Individual Medicine Ethics
13. Week	The relationship between individual medicine price benefits
14. Week	Pharmacovigilance

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	4	56
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
Total Work Load (hour) / 25(s)	**125/25=5**		
ECTS	**5**		

Evaluation System

Semester Work	**The number of**	**Contribution**
Midterm Exam	1	40%
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		
The sum of the grades		100

COURSE LEARNING OUTCOMES AND A RELATIONSHIP WITH PROGRAM QUALIFICATIONS

No.	PROGRAM QUALIFICATIONS		
		LO1	LO2
1	Degree level qualification at the level of expertise in the field of molecular medicine based on up-to-date information, enhances and deepens.	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
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.	3	3
4	The report of his research the author.	3	3
5	Empirical research plans.	3	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
7	Molecular Medicine and public health-related priority issues Area scientific clinical and/or descriptive research/presentations/publication.	3	3
8	The information related to the field of molecular medicine evaluates and directs the learning a critical approach.	3	3
9	Professional development related to the field of molecular medicine and performs studies the principles of life-long learning.	3	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.	3	3
11	The vocational and professional environment, social relationships, and those relationships are a critical perspective, norms and makes the need to improve them.	3	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
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.	3	3
14	Ethical principles and the importance of the individual and of the community for the Ethics Committee, ethics.	3	3
15	Molecular Medicine in the field with strategy, policy and implementation plans and results obtained within the framework of the quality processes.	3	3

Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent