Course Name	Code	Half term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
MOLECULAR MEDICAL MICROBIOLOGY AND VIROLOGY	MTP 521	1. Semester /Fall	3	0	0	5
Prerequisites	None					
Language	Turkish					
Course Type	Elective					
Teaching Methods	İnteractive, Powerpoint presentations, getting concerned datas via internet in the case of necesity					
Instructor(s)						
Course objectives	Examination and identification of microorganisms, structures, metabolic and genetic features of bacteria and viruses, differentiations from eukaryotic systems, antibiotic resistance mechanisms, extraction methods, DNA sequencing, qualitative and quantitative PCR methods, primer and probe design and molecular epidemiology					
Course learning outcomes	1. İntroduction to Medical Microbiology, Parasitology, Virology and learning of taxonomy 2. Have information about definition, classification and effect mechanisms of current antibiotics and chemotherapeutics, resistance mechanisms of bacterias againts them 3. Have information about bacterial genetics 4. Have information about general features of viruses					
Sources	1. Murray PR, Rosenthal KS, Pfaller MA(Eds) Medical Microbiology Sixth Edition Mosby Elsevier 2009 2. Brooks, G.,. Burtel T.S. (2001). Medikal Mikrobiyoloji . 22. baskı. SA Morse Lange					

Weekly Course Topics:

Week	Subjects
1.	Classification of microorganisms
2.	Identification of micriorganisms
3.	Structures and metabolic features of bacterias
4.	Genetic features of bacterias
5.	Structures and metabolic features of viruses
6.	Genetic features of viruses
7.	Differentiations of bacterias and viruses from eukaryotic systems
8.	Bacterial resistance mechanisms
9.	Diagnostic procedures of bacterial diseases
10.	Diagnostic procedures of viral diseases
11.	DNA extraction methods
12.	Qualitative PCR methods
13.	Quantitative PCR methods
14.	Molecular epidemiology

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	LO3	LO4
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	4
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	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
4	The report of his research the author.	3	2	3	3
5	Empirical research plans.	3	4	3	4
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	2
7	Molecular Medicine and public health-related priority issues Area scientific clinical and/or descriptive research/presentations/publication.	3	3	2	3
8	The information related to the field of molecular medicine evaluates and directs the learning a critical approach.	5	4	4	4
9	Professional development related to the field of molecular medicine and performs studies the principles of life-long learning.	4	4	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.	2	3	5	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	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	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	5
14	Ethical principles and the importance of the individual and of the community for the Ethics Committee, ethics.	4	4	3	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	3
Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent					