

Course Name	Code	Semester	Theoric (hours/week)	Practice (hours/week)	Labratory (hours/week)	AKTS
Molecular Biochemistry	MTP 502	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)						
Content of Lecture	Understanding of chemical reactions within cell in normal and pathological conditions. Biochemical parameters used in diagnostics and treatment					
Learning Outcomes	<ol style="list-style-type: none"> 1. Comparation of the structure of macro and micro molecules 2. Questioning of functions of macromolecules in organism 3. Questioning of labratory tests of micro and macromolecules in normal and pathological conditions 4. Questioning of organisation of clinical labratory 					
References	<ol style="list-style-type: none"> 1. Labratory of Biochemistry ,Türkan Yiğitbaşı,Nesrin Emekli,Medipol University Press,Istanbul,2013. 2. Harper's Illustrated Biochemistry, R.K. Murray, D.A. Bender, K.M. Botham, V.W. Rodwell, P.A. Weil, McGrawHill, 2009. 3. Lippincot's Illustrated Reviews, Biochemistry, P.C. Champ, R.A. Harvey, D.R. Ferrier, LWW, 2008 4. Biochemistry Figen Gürdöl, Evin Ademoğlu, Nobel Press, Istanbul, 2010 					

Topics of Weeks:

Weeks	Topics
1. Week	Basic components of biochemistry
2. Week	Digestion and Absorption of lipids and carbohydrates
3. Week	Energy metabolism
4. Week	Organisation of clinical biochemistry labratory
5. Week	Labratory tests of carbohydrate metabolism
6. Week	Labratory tests of liver
7. Week	Labratory tests of kidney
8. Week	Atherosclerosis and lipid metabolism
9. Week	Labratory tests of anemia
10. Week	Clinical approach to cardiac markers
11. Week	Labratory tests of hormones
12. Week	Vitamines
13. Week	Trace elements
14. Week	Pharmacological approach to clinical biochemistry tests

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

	The number of	Contribution
Semester Work		
Midterm Exam	1	%50
Half Year End Exam	1	%50
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	4	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.	3	3	3	3
4	The report of his research the author.	3	3	2	3
5	Empirical research plans.	5	4	4	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.	4	4	3	4
7	Molecular Medicine and public health-related priority issues Area scientific clinical and/or descriptive research/presentations/publication.	2	3	5	3
8	The information related to the field of molecular medicine evaluates and directs the learning a critical approach.	5	4	3	4
9	Professional development related to the field of molecular medicine and performs studies the principles of life-long learning.	3	3	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.	5	4	5	4
11	The vocational and professional environment, social relationships, and those relationships are a critical perspective, norms and makes the need to improve them.	4	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.	4	2	3	4
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.	2	3	5	3
14	Ethical principles and the importance of the individual and of the community for the Ethics Committee, ethics.	5	4	3	4
15	Molecular Medicine in the field with strategy, policy and implementation plans and results obtained within the framework of the quality processes.	4	3	3	4

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