

BİOCHEMİSTRY

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
Biochemistry	FTR 136	1.year/ 2.term spring	2	-	-	4
Prerequisites						
Course language	Turkish					
Course type	Elective					
Learning and teaching strategies	Theory					
Instructor (s)						
Course objective(Aim of course)	Aims to teach basic biochemical concepts necessary about Health Sciences					
Learning outcomes	<ol style="list-style-type: none">1. Knows the structures and functions of biomolecules and hormones.2. Knows signal transduction mechanisms and biomolecules playing roles in signal transduction.3. Knows how metabolism works in accordance with the bioenergetic principles.					
References	Lippincott Biyokimya, 3. Baskı. Editörler: Champe PC, Harvey RA, Ferrier DR.					

Course outline weekly:

Weeks	Topics
1. Week	Chemical bonds, water and buffer systems
2. Week	Amino acids and proteins
3. Week	Enzymes and coenzymes
4. Week	Carbohydrates
5. Week	Lipids and biological membranes
6. Week	Signal transduction mechanisms
7. Week	Hormones
8. Week	Midterm exam
9. Week	Carbohydrate metabolism
10. Week	Lipid Metabolism
11. Week	Amino acid and Protein Metabolism
12. Week	Bioenergetics and basic principles of metabolism
13. Week	Integration of metabolism, Basic concepts in clinical biochemistry
14. Week	Midterm exam
15. Week	FINAL EXAM

ECTS (Student Work Load Table)

Activities	Number	Duration	Total Work Load
Course Duration (X14)	14	2	28
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	1	10	10
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	1	8	8
Final Exam Preparation Time	1	12	12
Total Work Load (hour) / 25(s)	100/25=4		
ECTS	4		

Evaluation System

Mid-Term Studies	Number	Contribution
Midterm exams	1	%100
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
Total Time To Activities For Midterm		100
Final works		
Final	1	%100
Homework		
Practice		
Laboratory		
Total Time To Activities For Midterm		100
Contribution Of Midterm Studies On Grades		%50
Contribution Of Final Exam On Grades		%50
Total		100

The relationship between learning outcomes and the program qualifications of the courses

Program Qualifications	Learning outcomes		
	L.O.1	L.O.2	L.O.3
1. Sufficient background in basic- clinical medical sciences and physical therapy and rehabilitation discipline; ability to use theoretical and practical skills and knowledge in these fields with analytical thinking	5	5	5
2. Ability to determine, define, formulate and solve the factors that affect health; ability to choose and apply evidence based techniques and new methods for this aim.			
3. Ability to choose and use modern equipments, techniques and modalities for physiotherapy and rehabilitation practices; effectively use the informatique technologies.			
4. Ability to design multidisciplinary research, keep records, collect appropriate data, analysis and interpret results.			
5. Ability to attain new knowledge, make literature reviews, use medical databases and sources of information devoted to medical- health sciences			
6. To work autonomously and effectively in health team and self confidence to take responsibility			
7. To internalize characteristically development, literate and lifelong learning; quality development, to contribute education and promotion programs in field, to internationalize their professional behavior.			
8. To have professional deontology and ethical awareness			

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

