

BIOCHEMISTRY

1	Course Title:	BIOCHEMISTRY
2	Course Code:	KIM2201
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	2.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. BİLGİN OSMAN
15	Course Lecturers:	Araş. Gör. Dr. Aslı GÖÇENOĞLU SARIKAYA
16	Contact information of the Course Coordinator:	B.U.Ü. Fen-Edebiyat Fakültesi, Kimya Bölümü, Biyokimya Anabilim dalı bilgeno@uludag.edu.tr
17	Website:	
18	Objective of the Course:	To teach basic biochemical concepts, molecules that make up life and their interactions.
19	Contribution of the Course to Professional Development:	To have knowledge about the basic topics of biochemistry.
20	Learning Outcomes:	
	1	Learns the definition of biochemistry.
	2	Understands the cell structure and functioning.
	3	Learns the differences between animal and plant cells.
	4	Understands the importance of water necessary for life.
	5	Recognize the biomolecules in living things.
	6	Understands the function and role of biomolecules.
	7	Learns the chemical structure of biomolecules.
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Biomolecules and Cell Structure	
2	Biomolecules and Cell Structure	
3	Properties of Water and Aqueous Solutions	
4	Proteins	

5	Proteins	
6	Enzymes	
7	Enzymes	
8	Carbohydrates	
9	Carbohydrates	
10	Lipids and Membrane Structure	
11	Lipids and Membrane Structure	
12	Structures of Nucleotides and Nucleic Acids	
13	Structures of Nucleotides and Nucleic Acids	
14	Vitamins	

22	Textbooks, References and/or Other Materials:	Biyokimya, Prof. Dr. E. Edip KEHA, Prof. Dr. Ö. İrfan KÜFREVİOĞLU, Principles of Biochemistry. Lehninger.
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work project	0	0.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Contribution of Term (Year) Learning Activities to Success Grade	40.00	2.00	28.00
Practicals/Labs	0	0.00	0.00
Contribution of Final Exam to Success Grade	60.00	2.00	28.00
Self study and preperation	14		
Homeworks	0	0.00	0.00
Measurement and Evaluation Techniques Used in the Exams	0	0.00	0.00
Field Studies	0	0.00	0.00

24. ECTS/WORK LOAD TABLE			
Midterm exams	1	5.00	5.00
Others	0	0.00	0.00
Final Exams	1	5.00	5.00
Total Work Load			71.00
Total work load/ 30 hr			2.20
ECTS Credit of the Course			2.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	3	3	1	1	4	2	4	3	5	4	3	0	0	0	0
ÖK2	4	3	3	1	1	4	2	4	3	5	4	3	0	0	0	0
ÖK3	4	3	3	1	1	4	2	4	3	5	4	2	0	0	0	0
ÖK4	5	4	3	2	1	4	3	4	2	4	4	3	0	0	0	0

ÖK5	5	4	4	1	2	4	3	4	3	4	4	3	0	0	0	0
ÖK6	4	3	3	1	2	3	2	4	2	4	4	3	0	0	0	0
ÖK7	4	3	3	1	1	3	2	4	3	5	4	2	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			