

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		General Biochemistry								
Course Code		ST102		Couse Level		First Cycle (Bachelor's Degree)				
ECTS Credit	4	Workload	103 (Hours)	Theory 3		Practice	0	Laboratory	0	
Objectives of th	e Course	To give knowledge about biochemistry to undergraduate students of Dairy Technology Department.								
Course Content		Structure and properties of some basic biomolecules, biochemical energy transformations, occurance and dispersing of metabolic compounds, protein bisynthesisi, biological membranes, fat and fat metabolism, hormones.								
Work Placement		N/A								
Planned Learning Activities and Teaching Methods			Explan	atior	n (Presenta	tion), Discussi	on, Individua	al Study, Problem	Solving	
Name of Lecturer(s)  Assoc. Prof. Filiz YILDIZ AKO				GÜL						

Assessment Methods and Criteria								
Method	Quantity	Percentage (%)						
Midterm Examination	1	40						
Final Examination	1	70						

## **Recommended or Required Reading**

- 1 Temel Biyokimya Nobel Yayınları Ankara T.Anıl . 2009.
- 2 Biyokimya Gazi Yayınevi Ankara C.Tüzün 1995

Week	Weekly Detailed Course Contents						
1	Theoretical	Introduction to Biochemistry					
2	Theoretical	Sugars and monosaccharides					
3	Theoretical	Glicozids, oligosaccharides and poli saccharides					
4	Theoretical	Amino Acids					
5	Theoretical	Peptids and Proteins					
6	Practice	Enzymes					
7	Theoretical	Co-enzymes and Vitamins					
8	Intermediate Exam	Midterm					
9	Theoretical	Nucleic acids					
10	Theoretical	Protein biosynthesis					
11	Theoretical	Introduction to Metabolism Consept					
12	Theoretical	Protein Metabolism					
13	Theoretical	Fat					
14	Theoretical	Fat Metabolism					
15	Theoretical	Oxidative decarboxycilation and citrat cycle					
16	Final Exam	Term exam					

A ativity	Quantitu	Quantity		Duration		Total Workload	
Activity	Quantity	Preparation		Duration		Total Workload	
Lecture - Theory	14		2	2		56	
Individual Work	14		0	3		42	
Midterm Examination	1		0	3		3	
Final Examination	1		0	2		2	
Total Workload (Hours)							
[Total Workload (Hours) / 25*] = <b>ECTS</b>							
*25 hour workload is accepted as 1 ECTS							

## **Learning Outcomes**

1 Able to know structure and properties of some basic molecules and biochemical energy transformations.



Able to know what is metabolism and able to learn about basic metabolism activities.
 To obtain information about protein synthesis.
 Able to know carbohydrates, protein and fat metabolism activities.
 Have knowladge about basic compounds of living organisms.

#### Programme Outcomes (Dairy Technology) Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field. Determining the modern techniques, tools and information technologies required for applications related with his field and 2 ability to use them efficiently 3 Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field 4 Ability to have professional ethic and awareness. 5 Ability to work, decide, express opinions orally and in written individually Ability to participate team studies, taking responsibility, making leadership. 6 Ability to conceive Ataturk's principles and reforms, to communicate in Turkish and foreign language. 7 Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and 8 continuously renew himself. Having sufficient level of information about production and quality control of milk and dairy products and also product 9 development, increasing product quality and food security fields. Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling 10 techniques for this purpose. To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge

#### Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2:Low, 3: Medium, 4: High, 5: Very High

about legal results of the engineering applications related with his subject.

	L1	L2	L3	L4	L5
P1	4	4	4	4	5
P8	4	4	4	4	
P9	5	5	5	5	
P10	4	4	4	4	4

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