



**YILDIZ TECHNICAL UNIVERSITY**  
**FACULTY OF ELECTRICAL AND ELECTRONICS ENGINEERING**  
**DEPARTMENT OF BIOMEDICAL ENGINEERING**



**BME 2901 – BIOCHEMISTRY SYLLABUS**

**2020 – FALL**

<b>Course Schedule</b>	Monday 09.00-12.00 Wednesday 09.00-11.00 (Lab)	
<b>Classroom</b>	Online	
<b>Instructor's Name</b>	Assist. Prof. Görke Gürel Peközer	
<b>Office</b>	C-311	
<b>Phone</b>	(0212) 383 63 11	
<b>E-mail</b>	gpekozer@yildiz.edu.tr	
<b>Office Hours</b>	Tuesday 13.00-15.00 - Wednesday 13.00-15.00	
<b>Assistants' Name</b>	Yeliz Erşan, Burcu Doymuş	
<b>E-mail</b>	<a href="mailto:yelize@yildiz.edu.tr">yelize@yildiz.edu.tr</a> , <a href="mailto:bdoymus@yildiz.edu.tr">bdoymus@yildiz.edu.tr</a>	
<b>Textbooks:</b>	Lehninger Principles of Biochemistry, 7th Edition, David L. Nelson and Michael M. Cox, W.H.Freeman & Co Ltd.	
<b>Supplementary Materials:</b>	Course notes in pdf format will be uploaded on AVESIS website prior to upcoming class: <a href="http://avesis.yildiz.edu.tr/gpekozer/">http://avesis.yildiz.edu.tr/gpekozer/</a> Students are responsible of material presented on course notes.	
<b>Course Objectives</b>	This course explores the basic principles of biochemistry, biochemical composition of the body and major biochemical reactions that occur in the body.	
<b>Course and Lab Outline</b>	Week 1 Course Overview Week 2 Introduction to Biochemistry Week 3 Aminoacids, Peptides and Proteins Week 4 3D Structure of Proteins Week 5 Protein Functions and Enzymes Week 6 Protein Isolation and Purification Week 7 Nucleic Acids - I Week 8 Midterm 1 Week 9 Nucleic Acids - II Week 10 Carbohydrates Week 11 Lipids Week 12 Midterm 2 Week 13 Biological Membranes and Transport Week 14 Metabolism	Laboratory Rules and Safety Basic Biochemical Techniques Spectrophotometry Paper Chromatography Protein Quantification Enzyme Kinetics DNA isolation Gel Electrophoresis Carbohydrate Detection Lipid Detection
<b>Grading</b>	Midterm 1: %20 Midterm 2: %20 Final: %35 Laboratory: %25	
<b>Attendance</b>	Students are required to attend 70% of the classes according to Yıldız Technical University regulations.	