

<b>COURSE DESCRIPTION FORM</b>	
<b>Course Code and Name</b>	<b>KİM 210 Biochemistry for Dentistry</b>
<b>Course Semester</b>	3-4
<b>Catalogue Data of the Course</b> ( <i>Course Content</i> )	Evaluation of basic biochemical molecules in the organism, biochemical pathways, metabolism of biomolecules and diagnosis and follow-up of diseases in terms of clinical biochemistry.
<b>Course Textbooks</b>	Biochemistry (Lippincott), Harper's Biochemistry, Biochemistry (Lehninger), Biochemistry (Strayer L.), Biochemistry (Donald and Judith Voet)
<b>Supplementary Textbooks</b>	Tietz Textbook of Clinical Chemistry (Carl A. Burtis, Edward R. Ashwood), Biyokimya (Figen Gürdöl), literatures
<b>Credit (ECTS)</b>	5
<b>Prerequisites for the Course</b> ( <i>Attendance Requirements</i> )	It is compulsory for the student to attend the classes. This obligation is in accordance with Gazi University Faculty of Dentistry Education-Training and Examination directive.
<b>Course Type</b>	Vocational Technique
<b>Language of Instruction</b>	Turkish
<b>Course Objectives</b>	To be able to learn the basic subjects of biochemistry, to associate this knowledge with other disciplines and clinical biochemistry.
<b>Course Learning Outcomes</b>	<ol style="list-style-type: none"> <li>1. Learns basic biochemical reactions and molecular mechanisms from cell to organism,</li> <li>2. Comprehends basic molecules, understands their functions at cell, tissue and system level,</li> <li>3. Learns the basic concepts of metabolism, metabolic pathways and the interaction of metabolism,</li> <li>4. Have knowledge about regulation of metabolism and hormones</li> <li>5. Establishes a relationship between cell biochemistry and clinic using the information learned.</li> </ol>
<b>Instruction Method</b> ( <i>Face-to-face, Distance education etc.</i> )	Face to face
<b>Weekly Schedule of the Course</b>	<ol style="list-style-type: none"> <li>1. Week Introduction to biochemistry and biomolecules</li> <li>2. Week Basic concepts of biochemical reactions and bioenergetics</li> <li>3. Week Amino acids, peptides-proteins</li> <li>4. Week Metabolisms of amino acids</li> <li>5. Week Amino acid metabolism and related diseases</li> <li>6. Week Clinically important plasma proteins</li> <li>7. Week Enzymes</li> <li>8. Week Important enzymes in clinical biochemistry</li> <li>9. Midterm Exam I</li> <li>10. Week Carbohydrates</li> <li>11. Week Carbohydrate metabolism</li> <li>12. Week Disorders of carbohydrate metabolism and their clinical significance</li> <li>13. Week Lipids</li> <li>14. Week Lipid metabolism, its disorders and clinical significance</li> <li>15. Week Metabolism and clinical significance of lipoproteins</li> <li>16. Week Oxidative phosphorylation</li> <li>17. Week Nucleic acids and their structures</li> <li>18. Week Purine and pyrimidine metabolisms, disorders and clinical significance</li> <li>19. Midterm Exam II</li> <li>20. Week Vitamins and coenzymes, nutrition and vitamin deficiency</li> <li>21. Week General structure of tissues</li> <li>22. Week Connective tissue, collagen, cartilage and bone tissue</li> <li>23. Week Collagen and elastin metabolism</li> <li>24. Week Macroelements and trace elements</li> <li>25. Week Mineral metabolism</li> <li>26. Week Composition of blood, saliva, bile and other body fluids such as urine</li> </ol>

	27. Week Hemoglobin and porphyrin metabolism, disorders and clinical significance 28. Week Hormones and their metabolism, the role of hormones in the regulation of biochemical pathways								
<b>Teaching Activities</b> <i>(The time spent for the activities listed here will determine the amount of credit required)</i>	Weekly theoretical course hours:28 weeks / 3 hours. Weekly practical course hours:- Reading activities: 4 weeks / 3 hours. Internet search and library work: 3 weeks / 2 hours. Designing and implementing materials: Making a report:- Preparing and making presentations:: 2 weeks / 3 hours. Midterm and revision for midterm:1 week / 7 hours. Final exam and revision for final exam: 1 week / 10 hours								
<b>Assessment Criteria</b>		<b>Number(s)</b>	<b>Weight (%)</b>						
	Midterm exam	2	50						
	Assignment	1	10						
	Application								
	Project								
	Practice								
	Quiz								
	Final exam	1	40						
<b>Total</b>	<b>4</b>	<b>100</b>							
<b>Workload of the Course</b>	<b>Activity</b>	<b>Number of Weeks</b>	<b>Duration (Weekly Hour)</b>	<b>End of Semester Total Workload</b>					
	Weekly theoretical course hours	28	3	84					
	Weekly practical course hours								
	Reading activities	4	3	12					
	Internet search and library work	3	2	6					
	Designing and implementing materials								
	Making a report								
	Preparing and making presentations	2	3	6					
	Midterm and revision for midterm	1	7	7					
	Final exam and revision for final exam	1	10	10					
	<b>Total workload</b>			<b>125</b>					
	<b>Total workload/ 25</b>			<b>5.0</b>					
	<b>Course Credit (ECTS)</b>			<b>5</b>					
<b>Contribution Level between Course Outcomes and Program Outcomes</b>	No	<b>Program Outcomes</b>			1	2	3	4	5
	1	Knows the normal structure and functions of the human body and specifically the structures and teeth in the mouth area on the basis of cells, tissues, organs and systems, and their interactions with each other.						X	
	2	Defines the causes and formation mechanisms of oral, dental and jaw diseases, the findings they cause, structure and function disorders and how they affect the organism.					X		
	3	Knows, comprehends, relates and evaluates the symptoms and findings in the national core education program of Dentistry and the Extended Education Program of Gazi University Faculty of Dentistry, diseases and conditions and professional practices at a determined level.						X	
	4	Knows how to reach the best current scientific evidence, evaluate its reliability					X		

		and validity in line with personal learning needs.						
	5	Knows the legislation on professional legal responsibilities, deontology and ethical principles.			X			
	6	Knows and makes professional practices in the National Core Education Program of Dentistry and the Extended Education Program of Gazi University Faculty of Dentistry at the specified level.				X		
	7	It carries out diagnosis, treatment and follow-up processes by prioritizing evidence-based practice, critical thinking and ethical principles.			X			
	8	She/he is aware of her/his limitations, sets personal learning goals to support her professional development, and directs the patient to the appropriate center when necessary.			X			
	9	Knows the incidence of diseases in the mouth, teeth and jaws in society, contributes to the prevention and reduction.			X			
	10	While practicing her/his profession independently, she/he acts in accordance with the laws, regulations, legislation and ethical principles related to her duties and responsibilities.			X			
	11	Has teamwork and leadership skills, becomes a role model to colleagues and society.			X			
	12	She/he plans her/his personal professional development and realizes it with the principle of lifelong learning.			X			
	13	Establishes effective written and verbal communication with the patient, patient relatives, other health personnel, society, relevant sectors and the media.			X			
	14	Follows the innovations in her/his profession by using foreign language and information communication technologies.			X			
	<b>Lecturer(s) and Contact Information</b>	Lecturer's First/Last Name:Prof.Dr.Servet ÇETE E-mail address:scete@gazi.edu.tr						