

Course Name	Code	Semester	Theory (hrs/week)	Application (hrs/week)	Laboratory (hrs/week)	ECTS
<b>Hormone Biochemistry</b>	BIK518	Fall/Spring	1	0	0	6
Prerequisites	No					
Course language	Turkish					
Course Type	Optional					
Learning and teaching techniques of the course	Lecture, interactive					
Course instructor(s)	Prof. Dr. Mustafa YILDIRIM					
Course objectives	To learn about the types of hormones and the tissues in which they are secreted To learn the structure and metabolism of hormones To comprehend the general characteristics of receptors and receptor-hormone interaction To learn the hormones that control the development and physiology of tissues and cells Learn hormonal control of the reproductive system To learn the hormonal regulation of plasma glucose and calcium					
Learning outcomes of the course	Explain the role of cell membrane in differentiation of cells and tissues Learns how communication between tissues is regulated nervously Explain the working principles of hormones Describes the working principles of organs, systems and hormone systems that regulate metabolism					
Resources	Wictor W. Rodwell, David A. Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil (2019). Harper's Illustrated Biochemistry. 31st Edition. Ankara: Güneş Medical Bookstores. Lehninger, Nelson, DL. & Cox, MM. (2022). Principles of Biochemistry, 8. Baskı Harvey, Ferrier, (2019) Lippincott Biochemistry: Workbooks with Visual Narratives, Nobel Medical Bookstore Mehmetoğlu İ, (2019) Clinical Laboratory Handbook, 2. Print Nobel Medical Bookstore					

### Weekly Course Topics:

WEEKS	TOPICS TO BE DISCUSSED
1. Week	Endocrine organs and the concept of hormones
2. Week	Classification, secretion and transport of hormones
3. Week	The mechanism of action of hormones and their inactivation
4. Week	Neural control mechanisms and neuroendocrine system, neurotransmitter substances
5. Week	Hypothalamus and pituitary hormones
6. Week	Thyroid gland hormones
7. Week	Calcium, other minerals and hormones that regulate bone metabolism
8. Week	<b>Mid-term exam</b>
9. Week	Pancreatic and GIS hormones
10. Week	Catecholamines and serotonin
11. Week	Steroid Hormones
12. Week	Male sex hormones
13. Week	Female sex hormones
14. Week	Hormone-acting compounds

### Student Workload Table

Events	Number	Time	Total Workload
Lesson	13	1	13
Laboratory			
Application			
Fieldwork			
Out-of-Class Study Time (Freelancing/Group Work/Pre-Study)	10	11	110
Presentation (Shooting videos/Preparing posters/Making Oral Presentations/Focus Group Interviews/Conducting Surveys/Observation and Report Writing)	4	6	24
Seminar Preparation	1	9	9
Project			
Case Study			
Role Playing, Dramatizing			
Writing an article-Criticizing			
Mid-term exams	1	2	2
Final exams	1	2	2
<b>Total workload (hours) / 25(s)</b>		150 seconds / 25 seconds = 6	
<b>Ders ACT</b>			<b>6</b>

### Evaluation System

Semester Studies	Number	Contribution
Midterm Exam	1	%50
Quiz		
Laboratory		
Application		
Fieldwork		
Course-Specific Internship (If Available)		
Assignments		
Presentation and Seminar		
Projects		
Other		
<b>Total of Semester Studies</b>		<b>%50</b>
Final Work		
Finale	1	%50
Homework		
Application		
Laboratory		
<b>Total of Final Studies</b>		<b>%50</b>
The Contribution of Semester Studies to the Success Grade		%50
The Contribution of the Final Exam to the Success Grade		%50
<b>Sum of Success Grade</b>		<b>100</b>

**THE RELATIONSHIP BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM COMPETENCIES**

No	PROGRAM QUALIFICATIONS	Learning Outcomes			
		ÖÇ1	ÖÇ2	ÖÇ3	ÖÇ4
1	Have up-to-date knowledge at the level of expertise in the field of medical biochemistry based on undergraduate level competencies, develop and deepen them.	5	5	5	5
2	Has knowledge about information technologies, technical equipment and devices and instruments specific to the field at the level required by the field of Medical Biochemistry	4	4	5	5
3	Integrates the knowledge in the field of Medical Biochemistry with information from different disciplines, interprets it to create new information, analyzes and synthesizes using different research methods and proposes solutions.	5	5	5	5
4	He writes the report of his research.	4	4	4	4
5	Plans and conducts experimental research.	3	3	4	4
6	Constructs issues that require expertise in the field of Medical Biochemistry, proposes solutions, solves problems, evaluates the results obtained and applies them when necessary.	5	5	5	5
7	Conducts scientific, clinical and/or descriptive research/presentation/publication on priority issues related to the field of Medical Biochemistry and public health.	5	5	5	5
8	Critically evaluates the information related to the field of Medical Biochemistry and directs his/her learning.	5	5	5	5
9	Applies the principles of professional development and lifelong learning related to the field of Medical Biochemistry in the studies it performs.	5	5	5	5
10	Discuss and share his/her knowledge, current developments and his/her own studies in the field of Medical Biochemistry in a systematic way in written, oral and visual forms with groups in or outside the same field.	5	5	5	5
11	Critically examines the social relations in the professional and professional environment and the norms that guide these relations and does what is necessary to improve them.	5	5	5	5
12	Observes social, scientific and ethical values in the stages of collecting, recording, interpreting and announcing data related to the field of Medical Biochemistry and teaches these values.	4	4	5	5
13	Evaluates current developments in the field of Medical Biochemistry in line with national values and country realities, including the child and family, which are the basic units of society.	5	5	5	5
14	Knows the importance of ethical principles and ethical committees for the individual and society, and behaves ethically.	4	4	5	5
15	Develops strategies, policies and implementation plans on issues related to the field of Medical Biochemistry and	5	5	5	5

	evaluates the results obtained within the framework of quality processes.				
<b>Qualification level: 1: Low, 2: Low/Medium, 3: Medium, 4: High, 5: Excellent</b>					