

# BIOCHEMISTRY OF ENDOCRINE SYSTEM

1	Course Title:	BIOCHEMISTRY OF ENDOCRINE SYSTEM
2	Course Code:	TBK6006
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. EMRE SARANDÖL
15	Course Lecturers:	yok
16	Contact information of the Course Coordinator:	Prof. Dr. H. Asuman Tokullugil atokullu@uludag.edu.tr (224) 2953901 U.Ü. Tıp Fakültesi, Tıbbi Biyokimya AD, Görükle- BURSA
17	Website:	
18	Objective of the Course:	The aim of this course is to teach the structures, biosynthesis, secretion and metabolism of hormones . Following; in order to teach the effects of hormones in the human body , some of the endocrinological tests and their evaluation in the clinics are given as examples.
19	Contribution of the Course to Professional Development:	Contribution to academic development
20	Learning Outcomes:	
	1	To explain; The SIGNAL TRANSMISSION SYSTEMS
	2	To list ; The RECEPTORS: TYPES AND GENERAL CHARACTERISTICS
	3	To explain the mechanism of SECONDARY MESSENGER SYSTEMS
	4	To explain the HORMONES :DEFINITION AND IMPORTANCE IN MEDICINE
	5	To list the CLASSIFICATION OF HORMONES
	6	To explain the MODE OF ACTION OF HORMONES THAT HAVE INTRACELLULER RECEPTORS
	7	To explain the mechanism of NUCLEAR RECEPTORS.

		8	To explain the THYROID HORMONES AND IODINE METABOLISM,connected with nuclear receptors.		
		9	To explain the MODE OF ACTION OF HORMONES THAT HAVE INTRACELLULER RECEPTORS		
		10	To explain the MODE OF ACTION OF HORMONES THAT HAVE CELL SURFACE RECEPTORS		
21	Course Content:				
	Course Content:				
Week	Theoretical		Practice		
1	SIGNAL TRANSMISSION SYSTEMS-ENTRY				
2	RECEPTORS: TYPES AND GENERAL CHARACTERISTICS				
3	SECONDARY MESSENGER SYSTEMS: A-ADENYLATE CYCLASE AND cAMP SYSTEM				
4	G-PROTEINS AND EXAMPLES				
5	SECONDARY MESSENGER SYSTEMS: B-CALCIUM / PHOSPHATIDYLINOSITOL SYSTEM				
6	SECONDARY MESSENGER SYSTEMS:				
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretical	7 HORMONES :DEFINITION AND		14	1.00	14.00
Practicals/Labs			0	0.00	0.00
Self study and preparation	(EX.:DISORDERS OF HORMONE RECEPTORS)		14	9.00	126.00
Homeworks			0	0.00	0.00
8 Projects	CLASSIFICATION OF HORMONES		0	0.00	0.00
Field Studies			0	0.00	0.00
Midterm exams	9 IODINE METABOLISM		0	0.00	0.00
Others			0	0.00	0.00
Final Exams			1	10.00	10.00
Total Work Load					150.00
Total work load/ 30 hr					5.00
11 MODE OF ACTION OF HORMONES THAT HAVE INTRACELLULAR RECEPTORS					
ECTS Credit of the Course					5.00
	B-CYTOSOLIC RECEPTORS. EX.:GLUCOCORTICOIDS				
12	MODE OF ACTION OF HORMONES THAT HAVE CELL SURFACE RECEPTORS				
13	METABOLIC EFFEECTS OF GLUCAGON AND ADRENALINE : EFFECTS ON GLYCOLYSIS , GLUCONEOGENESIS , GLYCOGENOLYSIS AND GLYCOGENESIS				
14	ORGANIZATION , LOCALIZATION AND REGULATION OF ENDOCRINE SYSTEM				

22	Textbooks, References and/or Other Materials:	<p>1-MURRAY R.K. , GRANNER D.K. , MAYES P.A. , RODWELL V.W. HARPER'S BİYOKİMYA .Bölüm 20,44,46,49,51/(Çev.Editörü: Dikmen N.,Özguven T.) 25.Baskı,Nobel Tıp,İstanbul,2004. ss:199-208,534-550,561-567,588-602,610-625</p> <p>2-HARVEY R.A. , CHAMPE P.C. LİPPİNCOTT'S ILLUSTRATED REVIEWS BIOCHEMİSTRY .Bölüm: 11,23.(Çev.Editörü:Ulukaya E.) 3.Baskı , Nobel Tıp , 2007, İstanbul. ss.123-135,305-319</p> <p>3-BURTIS C.A. , ASHWOOD E.R. KLİNİK KİMYADA TEMEL İLKELER , TIETZ .Bölüm:26,27,40/ (Çev.Editörü:Aslan D.) 5.Baskı,Palme yayıncılık,Ankara,2005. ss.518-529,529-543,839-857.</p> <p>4-NELSON D.L. , MICHEAL M.C. LEHNINGER BİOKİMYANIN İLKELERİ.Bölüm: 13,14,23/ (Çev.Editörü:Kılıç N. ) 3.Baskı,Palme yayıncılık, Ankara, 2005.ss:437-485,485-527,869-907.</p> <p>5-BHAGAVAN N.V./ BHAGAVAN CHEMISTRY . chapter:13 . 2.Edition,Library of C ongress Cataloging in Publication Data,1978.pp:1213-1244.</p>
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<b>23</b>	Assesment	
<b>TERM LEARNING ACTIVITIES</b>	<b>NUMBER</b>	<b>WEIGHT</b>
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade		0.00
Contribution of Final Exam to Success Grade		100.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation are performed according to the Rules & Regulations of Bursa Uludağ University on Undergraduate Education.

24	ECTS / WORK LOAD TABLE
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ÖK9	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium			4 High			5 Very High					