



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Biochemistry of Extracellular Matrix							
Course Code		BYK525		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To have information about extracellular matrix							
Course Content		Composition of extracellular matrix, properties of the molecules in the extracellular matrix, structure and function of fibrillary and non fibrillary proteins structure, features and functions of collagen, structure and functions of proteoglicans and glucoseaminoglicans. Mediators which controls the cycle of extracellular matrix, factors taking part in extracellular matrix cycle (protein synthesis, enzymes leading to the destruction, inhibitors, and so on.) measuring methods of extracellular matrix cycle.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

### Recommended or Required Reading

1	Biochemistry by lehninger
2	Cell Biology of Extracellular Matrix:E.D. Hay
3	Extracellular Matrix Biology:Richard O. Hynes

Week	Weekly Detailed Course Contents	
1	Theoretical	Composition of extracellular matrix and properties of molecules in extracellular matrix
2	Theoretical	Composition of extracellular matrix and properties of molecules in extracellular matrix
3	Theoretical	The structure and function of fibrillar and nonfibrillar proteins
4	Theoretical	Structure, properties and functions of collagen
5	Theoretical	Structure and function of proteoglycans and glycosaminoglycans
6	Theoretical	Mediators controlling extracellular matrix cycle
7	Theoretical	Mediators controlling extracellular matrix cycle
8	Intermediate Exam	Quiz
9	Theoretical	Factors involved in the extracellular matrix cycle (protein synthesis, enzymes causing degradation, inhibitors, etc.)
10	Theoretical	Factors involved in the extracellular matrix cycle (protein synthesis, enzymes causing degradation, inhibitors, etc.)
11	Theoretical	Methods for measuring extracellular matrix cycle
12	Practice	Practices
13	Practice	Practices
14	Practice	Practices
15	Practice	Practices
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	10	1	3	40
Lecture - Practice	5	1	3	20
Assignment	10	1	4	50



Individual Work	1	2	13	15
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To have knowledge about the composition of extracellular matrix and the properties of molecules in extracellular matrix
2	Having knowledge about the structure and function of fibrillar and nonfibrillar proteins
3	To have information about collagen structure, properties and functions
4	Having knowledge about structure and function of proteoglycans and glycosaminoglycans
5	To have information about the factors involved in the extracellular matrix cycle
6	To have knowledge about methods of measuring extracellular matrix cycle

### Programme Outcomes (Biochemistry (Medical) Master)

1	To have basic theoretical knowledge about biochemistry and to help understanding biochemistry
2	To have the basic laboratory knowledge, apparatus and methods used in biochemistry
3	Analysis: To be able to analyze information critically
4	Synthesis: To be able to synthesize and adapt the knowledge in the field from different directions
5	Evaluation: To critically evaluate research in the field

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

	L1	L2	L3	L4	L5	L6
P1	5	4	4	4	5	4
P2	5	5	4	5	4	5
P3	4	4	5	5	5	4
P4	4	4	4	5	4	4
P5	5	5	5	4	5	5

