



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Cell Skeleton System							
Course Code		BİO633		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	175 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		It aims to give information about structure cell skeleton.							
Course Content		It aims to give information about structure, formation, dynamic and roles of microfilaments and intermediate filaments forming cell skeleton.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Geoffrey M. Cooper, Robert E. Hausman. The cell : a molecular approach Washington, D.C. : Sunderland, Mass. : ASM Press ; Sinauer Associates,.ISBN: 0878932143, 2004
2	K.R. Miller. Advances in cell biology, Hardbound, ISBN: 0-89232-886-X, 318 pages, 1988

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition, structure, types, functions and shapes of the cell
2	Theoretical	Structure and general characteristics of cell membrane
3	Theoretical	Types, structure and dispersion of lipids in cell membrane
4	Theoretical	Factors that effects membrane fluidity
5	Theoretical	Cell membrane proteins
6	Theoretical	Cell membrane models and functions of membrane
7	Theoretical	Cell membrane models and functions of membrane -Contuniation
8	Theoretical	Structure of cell skeleton, general functions of cell skeleton filaments
9	Theoretical	Structure of cell skeleton; actin, intermediate filaments
10	Theoretical	Microtubules in cell skeleton
11	Theoretical	Structure of cell skeleton; actin, intermediate filaments and microtubules-Contuniation
12	Theoretical	Functions of structures forming cell skeleton
13	Theoretical	Functions of structures forming cell skeleton
14	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	2	39
Assignment	13	2	1	39
Laboratory	13	2	2	52
Reading	13	2	1	39
Midterm Examination	1	2	1	3
Final Examination	1	2	1	3
Total Workload (Hours)				175
[Total Workload (Hours) / 25*] = ECTS				7

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To obtain information about the microscopic structure of the cell.
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2	To understand offormation and structure of cytoskeletal elements.
3	To provide knowledge about structure and functions of cellsat the molecular level in the biological sciences.
4	Following the latest developments occurring in the field of Cell Biology.
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Programme Outcomes (Biology Doctorate)

1	To have enough scientific background knowledge towards a specific study and research area
2	To have an ability to identify, evaluate and develop a solution for a problem on biological aspects
3	To be able to evaluate scientific observations and results of experiments using statistical analysis methods
4	To have basic skills in areas related to field of biological studies
5	To have the ability to develop cooperation with different disciplines with the high level of social communication required for studies
6	To have knowledge of technology and use of methods and means used in biological researches
7	To have an ethical understanding which will be a guide for their investigations and publications
8	For PhD; to have European Language Portfolio C1 general level language skill
9	To be able to present and discuss own research results in accordance with scientific discipline using technological tools in scientific research environments
10	To be able to detect and evaluate economic and social impacts of an own original research results
11	To be equipped with ability of carrying out independent study in biological field
12	To be able to publish at least one an international/national peer reviewed scientific paper and/or produce or interpret an original work related to biology in order to expand the frontiers of knowledge
13	To be able to develop new approaches or adaptations to be used in solving scientific and biological problems
14	To be able to develop new understanding and approaches in order to explain a new phenomenon or a biological event under investigation
15	To have abilities and experience to create new search area through inspiration gained from subject searched

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

	L1	L2	L3	L4	L5
P2	5	5	5	5	
P3	5	5	5	5	
P5	5	5	5	5	2
P7	5	5	5	5	
P8	5	5	5	5	
P10	5	5	5	5	

