



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
MEDICAL BIOLOGY
MEDICAL BIOLOGY
MEDICAL BIOLOGY MASTER
COURSE INFORMATION FORM

Course Title	Basic Applications in Cell Culture								
Course Code	TIB520	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	6	Workload	151 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course									
Course Content									
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation)								
Name of Lecturer(s)	Assoc. Prof. Mehtap KILIÇ EREN								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Moleküler Hücre Biyolojisi – Harvey Lodish et. al. (Türkçe çeviri: Hikmet Geçkil, Murat Özmen, Özfer Yeşilada) Palme kitabevi (2011)
2	Molecular Cell Biology – Harvey Lodish, Arnold Berk, Chris A. Keiser, Monty Krieger, Anthony Bretscher, Hidde Ploegh, Angelika Amon, Mathew P. Scott - W. H. Freeman; Seventh Edition edition (May 2, 2012)
3	Culture of Animal Cells: A Manual of Basic Technique and Specialized Applications– Ian Freshney - Wiley-Blackwell; 6 edition (September 17, 2010)

Week	Weekly Detailed Course Contents	
1	Theoretical	In vitro culturing conditions of eukaryote cells
2	Theoretical	Cell culture media
3	Theoretical	General purpose cell culture media and ingredients
4	Theoretical	Suspension cultures and ingredients I
5	Theoretical	Suspension cultures and ingredients II
6	Theoretical	Specialized cell culture media I
7	Theoretical	Specialized cell culture media II
8	Intermediate Exam	Midterm Exam
9	Theoretical	Application area of cell culture
10	Practice	Laboratory conditions of cell culture
11	Practice	Sterilization concepts
12	Practice	Laboratory equipment and organisation
13	Practice	Cell washing sterilization and storage
14	Practice	Cell counting and cell viability tests
15	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	2	1	39
Lecture - Practice	13	2	4	78
Midterm Examination	1	15	2	17
Final Examination	1	15	2	17
Total Workload (Hours)				151
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	1. Learning basic cellular functions in molecular level
2	Learning basic cell biology concepts
3	3. Learning cell biology culturing applications
4	4. Improving cell culture laboratory skills
5	

Programme Outcomes (*Medical Biology Master*)

1	To acquire fundamental knowledge on medical biology field
2	To gain expertise on molecular biology techniques
3	To utilize molecular biology techniques
4	To be able to construct and conduct a research project
5	To be able to follow and interpret scientific advancements

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

	L1	L2	L3	L4	L5
P1	5	5	2	2	2
P2	1	1	5	5	3
P3	1	1	5	5	3
P4	1	1	1	1	3
P5	3	3	3	3	5

