AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
HISTOLOGY AND EMBRYOLOGY
HISTOLOGY AND EMBRYOLOGY (MEDICAL)
HISTOLOGY AND EMBRYOLOGY (MEDICAL) MASTER'S WITHOUT THESIS
COURSE INFORMATION FORM

Course Title	Introduction to Cell Culture								
Course Code	THE531		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit	6	Workload	152 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Creation of primary cell lines and detailed cell culture techniques using commercial cell lines								
Course Content	Primary and cell lines, the general principles for the culture, the investigation of ethical problems								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Individual Study								
Name of Lecturer(s)	Prof. Kemal ERGİN								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Doku ve Hücre Kültürü Teknikleri

Week	Weekly Detailed Course Contents	
1	Theoretical	What is Cell Culture?
2	Theoretical	What is cell culture used for?
3	Theoretical	Introduction of the Cell Culture Laboratory
4	Theoretical	Cell Culture Systems
5	Theoretical	Media contents used in cell culture
6	Theoretical	comparing the differnet Media contents used in cell culture
7	Intermediate Exam	midterm exam
8	Theoretical	Sterilization in cell culture
9	Theoretical	Properties of culture vessels used in cell culture
10	Theoretical	Cell Lines and Usage
11	Theoretical	Primary cell culture and preparation
12	Theoretical	Primary cell production and culture
13	Theoretical	Cell Freezing and Storage
14	Theoretical	Biomaterials and their use in culture
15	Theoretical	3D culture media and its use
16	Final Exam	final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	2	2	56
Assignment	10	0	4	40
			Total Workload (Hours)	152
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to indicate laboratory and consumables used in cell culture
2	To be able to apply cell culture, passaging, freezing methods by using primary cell lines
3	To be able to distinguish the necessary cell culture methods and materials for different types of cells

4	correct use and sterilization of biosafety cabinets
5	To learn sterilization techniques

Programme Outcomes *(Histology and Embryology (Medical) Master's Without Thesis)*	
1	To have detailed information about cell structure and function at microscopic level
2	To have theoretical and practical knowledge about experimental methods used in histology
3	To know the ethical rules for publishing and presenting a scientific study
4	To have sufficient knowledge about the laboratory methods used in fertilization and assisted reproduction
5	to have enough knowledge about the general characteristics of human embryology

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	3	4	3	4	3
P2	4	3	4	3	3
P3	3	4	3	4	4
P4	4	3	4	3	3
P5	3	4	3	4	4