



**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	The Cell Membrane, Organelles, Evolving of the Cell Membrane Structure and Cell Division Discusses								
Course Code	THE500	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	6	Workload	154 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	At the graduate level; learning of cell definition, cell types and organelles in the structure and functional relationship								
Course Content	Describes cell membrane, organelles, cell membranes and cell division.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Project Based Study, Individual Study, Problem Solving								
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	Histology and Cell Biology
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Week	Weekly Detailed Course Contents	
1	Theoretical	General structure of cells
2	Theoretical	The cell membrane
3	Theoretical	Cell shapes
4	Theoretical	Cell nucleus and cell divisions
5	Theoretical	Cytoplasm, Plasma membrane models
6	Theoretical	Pinocytosis, endocytosis, phagocytosis, exocytosis
7	Theoretical	Cell membrane signaling and signals that regulated by intracellular receptors
8	Intermediate Exam	MIDTERM EXAM
9	Theoretical	Structure and function of mitochondria and ribosome
10	Theoretical	Structure and function of endoplasmic reticulum and Golgi complex
11	Theoretical	Structure and function of lysosomes and peroxisome
12	Theoretical	Structure and function of secretory granules
13	Theoretical	Microtubule, Silya, flagelya structure and function
14	Theoretical	Structure and function of microfilament and cytokeatin
15	Theoretical	Cytoplasmic inclusions, Cell components related diseases
16	Final Exam	FINAL EXAM

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Reading	14	0	3	42
Individual Work	14	2	2	56
			Total Workload (Hours)	154
			[Total Workload (Hours) / 25*] = ECTS	6

\*25 hour workload is accepted as 1 ECTS

#### Learning Outcomes

1	To be able to explain cell functions and differentiation
2	To be able to explain structure and function of cell organelles



3	To be able to explain diseases related to cell components
4	To be able to explain cell division types and their properties
5	Be able to define the structure and functions of cell nucleus

**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	3	3	4	4
P2	4	3	4	3	3
P3	3	4	3	3	2
P4	3	3	4	3	4
P5	3	4	3	3	5

