



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	Immuno- Histochemical Techniques								
Course Code	THE521	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	6	Workload	152 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	learning immunohistochemical techniques								
Course Content	techniques of demonstrating structures of interest using essentially antibodies.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, 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	Histoloji Konu Anlatımı ve Atlas
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to histochemistry and cytochemistry
2	Theoretical	Cytological preparation, fixation
3	Theoretical	Definition of immunohistochemistry, antigens and antibodies
4	Theoretical	primary antibodies
5	Theoretical	sekonder antibodies
6	Theoretical	monoklonal antibodies
7	Intermediate Exam	midterm exam
8	Theoretical	poliklonal antibodies
9	Theoretical	direct method
10	Theoretical	indirect method
11	Theoretical	Antigen Retrieval techniques
12	Theoretical	Immunohistochemical staining methods Problems encountered in immunohistochemical staining
13	Theoretical	Immunohistochemistry in Frozen Sections
14	Theoretical	Consideration in selection of immunohistochemical technique
15	Theoretical	article discussion
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
Individual Work	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	Cytological preparation, learning of fixation methods
2	To learn immunohistochemical monitoring and detection methods
3	Learning of antigen Retrieval techniques



4	Learning of immunohistochemistry techniques in Frozen sections
5	Properties of a good antibody, high interest against antigens and learning of high binding strength

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	5	3	4	3	4
P2	4	3	3	3	3
P3	4	3	4	4	4
P4	4	4	3	4	4
P5	4	3	4	3	4

