



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	Histochemical Techniques								
Course Code	THE502	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	6	Workload	154 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To learn the histological staining techniques								
Course Content	In the light microscope, the follow-up of the tissues to be examined and their dyes are shown.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion								
Name of Lecturer(s)	Prof. Alpaslan GÖKÇİMEN								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Animal Tissue Techniques
2	Histological Painting Techniques

Week	Weekly Detailed Course Contents	
1	Theoretical	Principles of histological staining and mechanism of staining
2	Theoretical	Natural stains
3	Theoretical	Mordants
4	Theoretical	Staining with acetone-carmin and aceto-orsein
5	Theoretical	Synthetic dyes and chemical classification of dyes
6	Theoretical	Metacromasia and Giemza technique
7	Intermediate Exam	Midterm exam
8	Theoretical	Nucleus and cytoplasm dyes
9	Theoretical	Adipose tissue paints
10	Theoretical	Polychrome methylene blue technique and Weigert's iron hematoxylin dye
11	Theoretical	Van Gieson dye and Trichrome Mallory technique
12	Theoretical	Heidenhain Azan dye and Masson technique
13	Theoretical	Gomori's aldehyde fuchsin technique
14	Theoretical	Verhoeff technique
15	Theoretical	Practical representation of different staining techniques
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	14	0	3	42
Total Workload (Hours)				154
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To learn principles of histological staining
2	To be able to explain the staining mechanism



3	To learn chemical classification of dyes
4	To learn different histological staining techniques
5	Application of different staining 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	2	4	3	4
P2	3	4	3	4	3
P3	3	5	3	4	3
P4	3	3	4	3	4
P5	3	4	3	4	3

