AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Stem Cell								
Course Code	THE509		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	206 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To comprehend the biological, molecular, and genetic features of the stem cell translationally in correlation with clinical parameters.								
Course Content	The basic features of stem cells such as pluripotency, self-renewal and differentiation, stem cell niche, stem cell-related genetic and epigenetic features, stem cell-specific markers, and stem cell types will be explained.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Sell S, Stem Cells Handbook, Humana Press, second edition, 2013
2	Rich IN, Stem Cell Protocols, Humana Press, 2015

Week	Weekly Detailed Course Contents	
1	Theoretical & Practice	Course description and general information
2	Theoretical & Practice	Stem Cell Definition and Morphology
3	Theoretical & Practice	Self Renewal and Differentiation
4	Theoretical & Practice	Properties of Stem Cell
5	Theoretical & Practice	Stem cell characterization
6	Theoretical & Practice	Stem Cell Niche
7	Theoretical & Practice	Differentiation in stem cells
8	Theoretical & Practice	Midterm exam
9	Theoretical & Practice	Stem Cell Related Signaling Pathways-I
10	Theoretical & Practice	Stem Cell Related Signaling Pathways-II
11	Theoretical & Practice	Tissue-Specific Stem Cell Markers
12	Theoretical & Practice	Pluripotent Stem Cell
13	Theoretical & Practice	Mesenchymal Stem Cell
14	Theoretical & Practice	Cancer Stem Cell
15	Final Exam	final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	2	39
Assignment	2	24	2	52
Laboratory	13	1	2	39
Midterm Examination	1	24	2	26
Final Examination	1	48	2	50
			Total Workload (Hours)	206
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Having knowledge about stem cells
2	Learns the general characteristics of stem cells
3	Explain the stem cell and its genetic relationship.
4	Explain stem cell acquisition and identification
5	Use of stem cells in treatment

Programme Outcomes *(Histology and Embryology (Medical) Master)*	
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	4	5	5	5	4
P2	5	4	4	5	5
P3	4	3	5	5	4
P4	5	4	4	5	4
P5	3	5	5	4	5