



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
STEM CELL AND REGENERATIVE MEDICINE (INTERDISCIPLINARY)
STEM CELL AND REGENERATIVE MEDICINE INTERDISCIPLINARY
STEM CELL AND REGENERATIVE MEDICINE INTERDISCIPLINARY MASTER
COURSE INFORMATION FORM

Course Title	Hematopoiesis and Hematopoietic Stem Cell								
Course Code	KHÜ526		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	203 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To understand hematopoiesis and hematopoietic stem cell								
Course Content	Basic concepts in hematopoiesis, definition of stem cells, features of stem cells, relationship between hematopoietic stem cells and microenvironment, clinical use of hematopoietic stem cells								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Lec. Yusuf Ziya ARAL								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	1	20

Recommended or Required Reading

1	Teoman Soysal . Kök hücre ve biyolojisi ve uygulama alanları (2014) Hematolog Türk Hematoloji derneği yayını
2	Greer J, Arber D, Glader B, List A, Menas R, Paraskevas F, Rogres G. Wintrob's Clinical Hematology, Lippincott, 2014.

Week	Weekly Detailed Course Contents	
1	Theoretical	Hematopoiesis (granulocytes)
2	Theoretical	Hematopoiesis (erythrocyte)
3	Theoretical	Hematopoiesis (platelets)
4	Theoretical	Basic concepts in hematopoietic stem cells
5	Theoretical	Definition of hematopoietic stem cells
6	Theoretical	Hematopoietic stem cell types
7	Theoretical	Niche concept in stem cell
8	Intermediate Exam	Mid-term exam
9	Theoretical	Hematopoietic stem cell markers
10	Theoretical	Hematopoietic stem cell proliferation dynamics and location
11	Theoretical	Hematopoietic stem cells in cord blood
12	Theoretical	Hematopoietic stem cell usage-I
13	Theoretical	Hematopoietic stem cell usage-II
14	Theoretical	Hematopoietic stem cell usage-III
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	2	39
Assignment	4	20	2	88
Midterm Examination	1	24	2	26
Final Examination	1	48	2	50
Total Workload (Hours)				203
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Have comprehensive and in-depth knowledge of hematopoiesis
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2	Hematopoietic defines the stem cell
3	Knows the clinical use of hematopoietic stem cells
4	Knows hematopoietic stem cell markers
5	Has an idea about hematopoietic stem cell proliferation dynamics

Programme Outcomes (Stem Cell and Regenerative Medicine Interdisciplinary Master)

1	To have comprehensive and in-depth knowledge of Stem Cell and Regenerative Medicine
2	To have information about stem cell production and characterization
3	To learn stem cell sources, stem cell types and their differences
4	To understand the molecular and genetic structure of stem cells
5	To be able to learn and make stem cell culture methods
6	To be able to adapt the knowledge in the field of stem cells to research in line with current developments
7	To be able to use molecular laboratory methods used in stem cell research
8	Learning in vitro disease models and in vivo experiments related to stem cells
9	To have knowledge about stem cell therapies and clinical use
10	Conduct independent research in accordance with the principles of research and publication ethics

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	1	3	3	3	3
P2		3	3	3	3
P3		2	2	2	2
P6		3	3	3	3
P9	4	4	4	4	4

