AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Embryogenesis and Cancer								
Course Code	THE638		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	8	Workload	206 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	It is given to teach the similarities and differences between cancer and embryogenesis and to teach their relationships with signaling pathways.								
Course Content	Topics such as Embryogenesis in Animals, Cancer Stem Cells and Embryogenesis, Signaling Pathways in Embryogenesis, Signaling Pathways in Cancer, Cancer Tissues and Similarities in Embryo Development will be covered.								
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	Molecular Oncology: Causes of Cancer and Targets for Treatment. 1st Edition. Gelmann Edward P. 2014. ISBN 978-0521876629
2	Principles of Molecular Oncology. Bronchud, Miguel H. ISBN 978-1-59259-664-5

Week	Weekly Detailed Course Contents	
1	Theoretical & Practice	Embryogenesis in Animals
2	Theoretical & Practice	Proliferation
3	Theoretical & Practice	Differentiation
4	Theoretical & Practice	Embryo Development Stages
5	Theoretical & Practice	Hypotheses for Embryo Development
6	Theoretical & Practice	Blood vessel development in cancer and embryo
7	Theoretical & Practice	Intercellular Interaction in the Embryo
8	Intermediate Exam	Midterm exam
9	Theoretical & Practice	Cancerous Tissues and Similarities in Embryo Development
10	Theoretical & Practice	Cellular Migrations and Signaling Pathways Similarities
11	Theoretical & Practice	Cancer models in experimental animals
12	Theoretical & Practice	Embryo working methods
13	Theoretical & Practice	Cancer Stem Cell and Embryogenesis
14	Theoretical & Practice	Literature research on Embryogenesis and Carcinogenesis
15	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	2	39
Lecture - Practice	13	1	2	39
Assignment	2	24	2	52
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	Understands the embryogenesis process in animals.
2	Knows the relationship between cancer stem cell and embryogenesis.
3	Discuss the similarities between cancer and embryogenesis.
4	Examine the similarities between signaling pathways in cancer and embryogenesis.
5	Knows the immune system similarities in cancer and embryogenesis. Knows the immune system similarities in cancer and embryogenesis.

Programme Outcomes *(Histology and Embryology Medical) Doctorate)*	
1	To have basic laboratory skills and attitudes
2	To be a scientist with strong educational background and presentation.
3	To have information about laboratory safety
4	To learn the histology and embryonic development of related organs and systems
5	To know the differences between related organs at the tissue level.

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