

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
DEVELOPMENT BIOLOGY	HSED1137480	Fall Semester	2+0	2	6
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Third Cycle (Doctorate Degree)				
Course Type	Elective				
Course Coordinator	Assoc.Prof. Seda KARABULUT				
Name of Lecturer(s)	Assoc.Prof. Seda KARABULUT				
Assistant(s)					
Aim	The aim of the lesson is to acquire the basic and detailed knowledge about developmental biology				
Course Content	This course contains; Spermatogenesis,Oogenesis,fertilization,Implantation,2nd week of embryonic development,3rd week of embryonic development,Midterm,Extraembryonic structures,Introduction to systems embryology,Cellular differentiation in the embryonic process,Epigenetic regulation,Signal transmission mechanisms in the embryonic process,Other mechanisms involved in embryonic development,Final exam.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Explains the basic information about spermatogenesis and oogenesis.			14, 9	A, E	
Explains epigenetic mechanisms.			14, 9	A, E	
Explains the fertilization process and its stages.			14, 9	A	
Explains the implantation process and its stages.			14, 9	A	
It describes the 2nd week of early embryonic development.			14, 37, 9	A	
Describes the 3rd week of early embryonic development.			14, 37, 9	A	
Defines the process of organogenesis.			14, 37, 9	A	
Explains the mechanisms involved in embryonic development.			14, 9	A, E	
Teaching Methods	14: Self Study Method, 37: Computer-Internet Supported Instruction, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Spermatogenesis	Reading the relevant course presentation			
2	Oogenesis	Reading the relevant course presentation			
3	fertilization	Reading the relevant course presentation			
4	Implantation	Reading the relevant course presentation			
5	2nd week of embryonic development	Reading the relevant course presentation			
6	3rd week of embryonic development	Reading the relevant course presentation			
7	Midterm	-			
8	Extraembryonic structures	Reading the relevant course presentation			
9	Introduction to systems embryology	Reading the relevant course presentation			
10	Cellular differentiation in the embryonic process	Reading the relevant course presentation			
11	Epigenetic regulation	Reading the relevant course presentation			
12	Signal transmission mechanisms in the embryonic process	Reading the relevant course presentation			
13	Other mechanisms involved in embryonic development	Reading the relevant course presentation			
14	Final exam	-			
Evaluation Methods		Weight(%)			
Midterm Exam		50			
General Exam		50			
Resources					
Lecture notes, Essential Developmental Biology, 3rd Edition Jonathan M. W. Slack November 2012, 2012, Wiley-Blackwell					