



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**MATHEMATICS AND SCIENCE EDUCATION**  
**SCIENCE EDUCATION**  
**SCIENCE EDUCATION MASTER**  
**COURSE INFORMATION FORM**

Course Title	General Biology II								
Course Code	İFB516		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Giving information on animal and human systematic and on the examination of anatomic, histologic and physiologic features of all systems in humans								
Course Content	Among living beings and nature, energy flow, energy flow in other living systems: how cell respiration takes place, where the investigation and examination of the energy obtained from respiration. Comparison of photosynthesis and respiration in the animals and plants. In animals, tissues, and features: a tissue types, functions, and study their properties. In animals, reproduction, fertilization, and development: the importance of reproduction, fertilization types, stages of embryonic development, developmental processes in different animal species. Animal nutrition and digestion: diet of the animals according to their classification and examination of their habitats, according to the digestive system, differences in nutritional patterns. Animals: Respiration varieties, according to the characteristics of animals and their habitat respiratory properties. In animals, excretory system: developmental stages of excretion, excretory products and compare the differences between them. Circulatory system in animals. Heart, blood vessels and blood examination, with open and closed circulatory system of animals. In animals, the nervous system: the nervous system by examination of the structures, comparison of the differences in animal classes. Homeostasis: Your body may be in harmony with the external environment and internal balance in providing a variety of stimuli from the outside of buildings involved in the physiological and morphological examination.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, 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	Şahin, Y. (2007). Biyolojide Geçmiş Yolculuk. Ankara: Palme Yayıncılık.
2	Süzen, B. (2003). Biyoloji.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the course, meeting
2	Theoretical	Embryological development stages of animals
3	Theoretical	Embryological development stages of people
4	Theoretical	Metabolic events inside the cell
5	Theoretical	Communication systems inside the cell
6	Theoretical	Communication systems inside the cell..
7	Theoretical	summary
8	Intermediate Exam	MIDTERM
9	Theoretical	Illnesses caused by these defects
10	Theoretical	Endomitosis, amitosis, mitosis and meiosis
11	Theoretical	Classification of animals
12	Theoretical	Comparison of animals in terms of developmental stages
13	Theoretical	Anatomic features of systems of people
14	Theoretical	Histological features of systems
15	Theoretical	Physiological features of systems
16	Final Exam	TERM



**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Assignment	5	10	0	50
Reading	5	9	0	45
Midterm Examination	1	10	2	12
Final Examination	1	20	3	23
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	To be able to understand classification of animals.
2	To be able to understand the aspects of animals.
3	To be able to understand the systems.
4	To be able to recognize to body and organ systems of human beings.
5	To be able to comprehend organ systems of animals and their physiology

**Programme Outcomes (Science Education Master)**

1	To be able to have an expert theoretical knowledge within the field of science education.
2	To be able to transfer expert knowledge gained in science education into various instructional environment.
3	To be able to integrate science education knowledge with the other disciplines and product functional knowledge
4	To be able to use information and communication technologies efficiently in conceptual learning
5	To be able to find scientific solutions to the problems in the field of science education
6	To be able to evaluate the knowledge critically in the field
7	To be able to participate in team projects in the science education field
8	To be able to adopt lifelong learning strategies to his/her studies
9	To be able to use at least one foreign language efficiently in oral and verbal communication
10	To be able to share national and international data in the field of science education
11	To be able to comprehend and evaluate science-technology-society and environment interactions
12	To be able to comprehends science under the ethical values and take account of ethical considerations
13	To be able to use scientific information in the other domains that is gained in the masters field and have the transfer skills
14	To be able to follow the current development in the science education field
15	To be able to develop strategical plans and evaluate them in the context of quality processes

**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	4	4	5	5
P6	2	2	2	5	5
P7	2	2	2	5	5
P8	4	4	4	5	5

