AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Biology II								
Course Code	FBÖ253		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Introduction to metabolism, cell respiration and fermentation; photosynthesis; comparison of cell respiration and photosynthesis; Animal structure and function of animal tissue and systems will be covered.								
Course Content	Introduction to metabolism, cell respiration and fermentation; photosynthesis; comparison of cell respiration and photosynthesis; animal structure and function; reproductive system, asexual and sexual reproduction in animals; nutrition and digestion in animals, nutritional mechanisms in animals; comparison of animals with circulatory system, open and closed circulatory system, examination of cardiac, vascular and blood structures; gas exchange in animals, respiratory surfaces, respiratory organs and respiratory mechanisms; comparison of excretory system, ozmoregulation, excretion products in animals and diversity in excretory systems; nervous system in the animals, nervous system types, central and peripheral nervous system; sensory mechanisms, hearing and balance, vision, sniffing and taste, touch; endocrine system, hormones, feedback, functions of hormones; support and movement systems in animals, external and internal skeleton, types of bones, joints, muscle types and mechanisms of contraction and open and closed-ended experiments.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, 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	Campbell, N., Reece, J. Biyoloji, Palme Yayınevi, 2017.
2	Karaçay, B., Yaşamın Sırrı DNA, TÜBİTAK Popüler Bilim Kitapları 333, 2013.
3	Öğretim üyesinin derlediği ders notları
4	İnternet Kaynakları; www.evrimagaci.com

Week	Weekly Detailed Course Contents	
1	Theoretical	1 Course contents and definition
2	Theoretical	2 Introduction to metabolism; General information about the laboratory
3	Theoretical	3 Cell respiration and fermentation and open and closed-ended experiments
4	Theoretical	4 Comparison of photosynthesis, cell respiration and photosynthesis and open and closed-ended experiments for these subjects
5	Theoretical	5 Animal tissues and open and closed-ended experiments
6	Theoretical	6 Reproductive system in animals, asexual and sexual reproduction in animals and open and closed-ended experiments.
7	Theoretical	7 Nutrition and digestion in animals, nutrition mechanisms in animals and open and closed-ended experiments on these subjects
8	Theoretical	Midterm
9	Theoretical	9 Comparison of animals with circulatory system, open and closed circulatory system, examination of cardiac, vascular and blood structures and open and closed-ended experiments.
10	Theoretical	10 Gas exchange in animals, respiratory surfaces, respiratory organs and respiratory mechanisms and open and closed-ended experiments
11	Theoretical	11 Discharge system in animals, ozmoregulation, comparison of excretory products and diversity in excretory systems and open and closed end experiments for these subjects
12	Theoretical	12 Nervous system in nervous system, nervous system types, central and peripheral nervous system and open and closed-ended experiments
13	Theoretical	13 Sensory mechanisms, hearing and balance, vision, sniffing and taste, touch and open and closed-ended experiments

14	Theoretical	14 Endocrine system, hormones, feedback, functions of hormones and open and closed-ended experiments for these subjects
15	Theoretical	15 Support and movement systems in animals, external and internal skeleton, bone types, joints, muscle types and contraction mechanism and open and closed-ended experiments for these subjects
16	Final Exam	Final

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	11	0	2	22
Reading	8	0	1	8
Midterm Examination	1	0	6	6
Final Examination	1	0	8	8
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. Introduction to metabolism
2	2. Cell respiration and fermentation
3	3. Photosynthesis
4	4. Comparison of cell respiration and photosynthesis
5	5. Animal structure and function of animal tissues and systems

Programme Outcomes *(Science Teacher Education)*	
1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophy they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter.
7	To be able to become individuals faithful to the Principles and Revolutions of Ataturk, be modern democratic, secular, protecting and deveoping one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture.
9	To be able to become individuals believing in lifelong learning.
10	To be able to gain the vision of being individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solutions of these problems.

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	5	5	5	5
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	5	5	4	4	4
P6	4	4	5	4	5
P7	5	5	4	4	4
P8	4	4	5	5	5
P9	5	5	4	5	4
P10	4	4	4	5	5