AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Biology I								
Course Code	FBÖ154		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To introduce biology science and its importance, to give general information about biology, to introduce the main areas of biology and other related areas, to introduce the basic terminology in biology, to talk about the historical development of biology.								
Course Content	Meaning, areas, importance, historical development of biology; living and inanimate structures; diversity and classification of living things (prokaryotes, eukaryotes, species concept and taxonomic structures, species concept and taxonomic structure, structure and properties of plants); basic unit of life (cell, cell structure and function, membrane structure and function); cell division (mitosis, meiosis and uncontrolled cell division); tissues (plant tissues, dividing tissue, invariant tissue); plant organs and structures (vegetative organs, generative organs, reproductive, fertilization and development in flowering and flowering plants); an overview of animal diversity (general characteristics of invertebrate animals and chords) and open and closed end experiments on these topics								
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	Mauseth, D., Botanik-Bitki Biyolojisine Giriş, Nobel Yayınevi, 2012.
3	Hayri Öztaş, Fen Bilgisi Eğitimi Öğrencileri İçin Biyoloji 1, Nobel Yayınevi, 2019.
4	Karaçay, B., Yaşamın Sırrı DNA, TÜBİTAK Popüler Bilim Kitapları 333, 2013.
5	Öğretim üyesinin derlediği ders notları
6	İnternet Kaynakları; www.evrimagaci.com

Week	Weekly Detailed Course Contents	
1	Theoretical	1 Course contents and definition
2	Theoretical	2 Meaning, areas, importance, historical development of biology; Giving general information about the laboratory
3	Theoretical	3 Living and lifeless structures are the main features of a living structure; General rules and safety precautions that must be observed in laboratories
5	Theoretical	5 Diversity and classification of living things (species concept and taxonomic structures); Activities aimed at reinforcing the concept of species and classification units
6	Theoretical	6 Diversity and classification of living things (structure and characteristics of plants); Examination of specimens related to the plant structure of Tallus and kormus
7	Theoretical	7 Basic unit of life (cell, cell structure and function, membrane structure and function); Examination of plant and animal cell samples
8	Intermediate Exam	midterm
9	Theoretical	9 Basic unit of life (cell, cell structure and function, membrane structure and function); Examination of plant and animal cell samples
10	Theoretical	10 Cell division (mitosis, meiosis and uncontrolled cell division); Examination of mitosis in onion stem cells
11	Theoretical	11 Tissues (vegetative tissues, dividing tissue, invariant tissue); Examination of different plant tissue samples
12	Theoretical	12 Plant organs and structures (vegetative organs); Examination of root, stem and leaf parts in seeded and seedless plants
13	Theoretical	13 Plant organs and structures (reproductive, fertilization and development in flowering and flowering plants); Examination of capsules and flower parts in seeded and seedless plants

14	Theoretical	14 Plant organs and structures (reproductive, fertilization and development in flowering and flowering plants); Germination related activities
15	Theoretical	15 An overview of animal diversity (general features of invertebrate animals and chords)
16	Final Exam	16 FINAL EXAM

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
Midterm Examination	1	10	0	10
Final Examination	1	12	0	12
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	1. Introducing biology and embedding importance
2	2. Giving general information about biology
3	3. Introduce sub-major areas of biology and other related areas
4	4. To introduce the basic terminology in biology
5	5. The about the historical development of the science of biology

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	4	4	4	4	4
P2	2	2	2	2	2
P3	2	2	2	2	2
P4	2	2	2	2	2
P5	2	2	2	2	2
P6	4	4	4	4	4
P7	2	2	2	2	2
P8	2	2	2	2	2
P9	2	2	2	2	2
P10	4	4	4	4	4