

BIOLOGY LABORATORY II

1	Course Title:	BIOLOGY LABORATORY II
2	Course Code:	FEN1116
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	2.00
8	Theoretical (hour/week):	0.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	2
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. MUSTAFA ÖZKAN
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	Prof. Dr. Mustafa ÖZKAN Bursa Uludağ Üniversitesi Eğitim Fakültesi Matematik ve Fen Bilimleri Bölümü Fen Bilgisi Anabilim dalı Öğretim Üyesi Tel :40683
17	Website:	
18	Objective of the Course:	The objectives of this lesson are: To introduce the structures of the organ systems of animal organisms To explain how the organ systems of animal organisms operate
19	Contribution of the Course to Professional Development:	This course will provide students with an advanced level of theoretical, methodological and factual knowledge in the field of "Teaching Profession General Competencies" and "Professional Knowledge" in a way that includes an interrogative perspective. In addition, this course contributes to the students' ability to acquire competencies specific to the field, by enabling them to obtain advanced theoretical knowledge from the basic field of teacher training and educational sciences and the ability to use them.
20	Learning Outcomes:	
	1	The students will learn the differences between living and non-living and between plants and animals.;
	2	The students will explain and compare the classification of animals and sexual and asexual reproduction.;
	3	The students will have information about animal tissues;
	4	The students will describe feeding mechanisms and digestion in animals;
	5	The students will describe the types, structures and functions of circulation in animals.;
	6	The students will explain how and with what mechanisms animals realize gas exchange ;
	7	The students will compare and explain excretory systems and products in animals;
	8	The students will explain the nervous systems and sensory mechanisms in animals with their structure and functions;
	9	The students will explain the structure and functions of the endocrine system;
	10	The students will explain the structures and functions of support and movement systems in animals;
21	Course Content:	

Course Content:			
Week	Theoretical	Practice	
1		Laboratuvarıy rules	
2		Microscope and Parts, Measuring under the microscope	
3		Plant cell and animal cell	
4		Plazmolysis, deplazmolysis, turgor	
5		Cell concept, tongue and cheek epithelial cell, frog epithelial cell	
6		Single-layered and multi-layered epithelium cell: Single-layered cylindrical epithelium cell Mammal skin prepare, frog skin prepare	
7		Blood tissue, blood types,	
8		Midterm Exam	
9		Mitosis and meiosis	
10		Ligaments, collagen fibers Adipose tissue	
11		Muscle tissue: smooth muscle and striated muscle, heart muscle	
12		Bone tissue, cartilage tissue	
13		Protista, Euglena, Plathelminthes	
14			
22	Textbooks, References and/or Other Materials:	Neil A. Campbell-Jane B. Reece. Biology (Çeviri Ed. Gündüz E., Demirsoy A., Türkan İ) 6. Baskı 2006, Palme Yayıncılık, Ankara. William T. Keeton, James L. Gould ve Carol Grant Gould (Çeviri Ed. Ali Demirsoy ve İsmail Türkkan) Palme Yayıncılık, Ankara. Demirsoy A. Yaşamın Temel Kuralları. Cilt I-II 2. Baskı. Hacettepe Üniversitesi Yayınları A/52. 1985, Ankara	
23	Assesment		
TERM LEARNING ACTIVITIES		NUMBER	WEIGHT
Midterm Exam		1	40.00
Quiz		0	0.00
Home work-project		0	0.00
Final Exam		1	60.00
Total		2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00	
Contribution of Final Exam to Success Grade		60.00	
Total		100.00	
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation is carried out according to the principles of Bursa uludag University Associate and Undergraduate Education Regulation.	
24	ECTS / WORK LOAD TABLE		

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	0	0.00	0.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	0	0.00	0.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	16.00	16.00
Total Work Load			54.00
Total work load/ 30 hr			1.80
ECTS Credit of the Course			2.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	5	4	5	4	4	5	4	5	4	3	4	4	4	4	4
ÖK2	5	4	5	4	5	4	5	4	5	4	4	4	4	4	3	4
ÖK3	5	5	4	5	5	4	5	4	4	4	5	5	5	4	5	4
ÖK4	5	4	5	4	5	4	5	4	4	5	4	5	4	5	5	5
ÖK5	4	5	5	5	5	4	4	4	4	4	5	5	4	3	5	4
ÖK6	5	4	5	4	5	4	5	5	4	5	5	5	4	4	4	5
ÖK7	4	5	5	5	5	5	4	4	4	4	5	5	4	4	4	4
ÖK8	4	4	4	5	5	5	5	4	4	4	5	5	5	5	5	4
ÖK9	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5
ÖK10	5	4	4	4	4	4	5	5	5	5	4	4	5	5	5	4
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			