BIOLOGY III

1	Course Title:	BIOLOGY III	
2	Course Code:	FEN3311	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	3	
6	Semester:	5	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. ŞİRİN İLKÖRÜCÜ	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Prof. Dr. Şirin İlkörücü ilkorucu@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	To analyze, to interpret the reflections of the basic theories and approaches on these subjects to science.	
19	Contribution of the Course to Professional Development:	This course has an advanced level of theoretical and factual knowledge in the field, including a critical perspective. This course contributes to the ability to use the advanced knowledge acquired in the field of TYYÇ 6 level, to the ability to use the theoretical and applied knowledge, and to the learning competence to evaluate the advanced knowledge and skills acquired in the field with an approach.	
20	Learning Outcomes:		
		1	Questioning and analyzing genetics and evolution related topics and concepts in science class
		2	Can interpret the relationship between genetic and evolution related facts and science.
		3	Follow the current events and developments related to genetics and evolution
		4	Evaluate the developments in biotechnology critically
		5	Can critically evaluate and classify different views on the theory of evolution
		6	Questioning and interpreting the historical development of the theory of evolution
		7	The emergence of life forms from simple creatures to mammals, can interpret their subjects
		8	
		9	
		10	
21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	ntroduction	

2	Areas, importance and historical development of genetics and biotechnology; history of modern genetic science	
3	DNA replication, mutations	
4	Mendel's genetics and probability	
5	Multiple alleles, pedigree and hereditary inheritance	
6	Deviations from Mendel's heredity	
7	Gene linkaj	
8	Population genetics	
9	Migration and genetic drift	
10	Important scientists in the emergence of the evolutionary view	
11	Darwin's view of natural selection and variation	
12	Isolation and speciation	
13	History of life and Fossil Research	
14	Application fields of evolutionary biology	

22	Textbooks, References and/or Other Materials:	1-B. Başıbüyük, H.H. Karaytuğ, S. Gündüz, İ. Evrimsel Analiz, 2002. Palme Yayıncılık, 708 s. (Freeman, S. Herron, J.C'den çeviri) 2-Yıldırım, A., Karadağ, Y, Kandemir, N., Sakin, M.A. 2008. Genetik. Nobel Yay. Dağıtım Ltd. Şti. Ankara.270s.

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	7	1.00	7.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Midterm Exam	1	40.00	
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Home work-project	0	0.00	
Others	0	0.00	0.00
Final Exams	1	15.00	15.00
Total	2	100.00	
Total Work Load			60.00
Total work load/ 30 hr			2.00
ECTS Credit of the Course			2.00

Total	100.00
Measurement and Evaluation Techniques Used in the Course	Teaching lecture, brainstorming, critical discussion, question-answer, cooperative learning and group work methods are applied in this course.

23 Assessment

	K	
Midterm Exam	1	40.00
Quiz	0	0.00
Midterm exams	1	10.00
Home work-project	0	0.00
Final Exam	1	50.00
Final Exams	1	15.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00

24 ECTS / WORK LOAD TABLE

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	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1

Ve Teorileri (2016). Ankara: Lisans Yayıncılık. ISBN:9786055044817

ÖK2	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1
ÖK3	4	1	1	3	4	1	1	1	1	1	5	1	1	1	1	1
ÖK4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ÖK5	1	4	1	1	4	4	1	1	1	1	1	1	1	1	1	1
ÖK6	1	1	1	1	1	3	1	1	1	3	1	1	1	1	3	1
ÖK7	4	2	1	1	1	1	1	1	1	1	4	1	1	2	1	1

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**