



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Evolution							
Course Code		FBÖ403		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To enrich evolution subjects with examples from daily life and to connect with science and technology teaching curriculum scheduled in 4.and 8 classes.							
Course Content		Description of evolution, Development of evolution concept. Darwin's theory and new synthesis theory. Anorganic evolution, evolution of plant and animal. Adaptation, Variation, origin of variation: Mutation, Recombination, migration, determined of genetic variation: cross experiments, artificial selection, natural selection, habitat, seasonal-ethologic-mechanic-physologic isolation (Gametic mortalite) mechanisms. Postzygotic isolation mechanisms: zygotic mortalite, hybrid sterility, species formation approaches: seconder species, primen spesies, allopatric species, parapatric species, human evolution. To enrich these subjects with examples from daily life and to connect with science and technology teaching curriculum scheduled in 4.and 8 classes.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi
2	Demirsoy A., Kalıtım ve Evrim, 1994

Week	Weekly Detailed Course Contents	
1	Theoretical	Description of evolution, Development of evolution concept
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
2	Theoretical	Darwin's theory and new synthesis theory.
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
3	Theoretical	Anorganic evolution
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
4	Theoretical	evolution of plant and animal, adaptation, variation
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
5	Theoretical	Origin of variation: Mutation, Recombination, migration
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
6	Theoretical	determined of genetic variation: cross experiments
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi
7	Theoretical	artificial selection, natural selection,
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
8	Theoretical	habitat, seasonal-ethologic-mechanic-physologic isolation (Gametic mortalite) mechanisms.



8	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
9	Intermediate Exam	midterm exam
10	Theoretical	Postzygotic isolation mechanisms: zygotic mortalite, hybrid sterility,
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
11	Theoretical	species formation approaches: seconder species
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi
12	Theoretical	primen spesies,
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
13	Theoretical	allopatric species, sympatric species, parapatric species,
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi Demirsoy A., Kalıtım ve Evrim, 1994
14	Theoretical	human evolution
	Preparation Work	Freeman S., Herron T.C., 2006, Evrimsel Analiz (Çeviri: S. Karaytuğ, İ. Gündüz, B.Çıplak, H.H. Başibüyük.) Palme Yayınevi
15	Final Exam	FINAL EXAM

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	14	0	2	28
Term Project	3	0	5	15
Reading	14	0	3	42
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	be able to know development of evolution concept.
2	be able to understand evolution of plant and animals.
3	be able to know basic evolution concept
4	be able to connect 8 with science and technology teaching curriculum scheduled in 4.and 8 classes
5	know the laws of evolution.

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 Atatürk, 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
P1	5	5	5	5
P6	4	5	5	4
P10	4	4	5	5

