



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Evolution							
Course Code		ÇS309		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		1. To inform about earth's formation and the formation of the lives on earth, also about Darwin's evolution theory and different opinions on this issue. 2. To be presented the factors that influence the formation of new species and the evidence of the evolutionary changes. 3. To inform about the issues that the works are done in the today's evolutionary genetics field how it affects / can affect.							
Course Content		Definition of the Evolution, historical development and change of this concept. Darwin's theory of evolution, the new synthesis theory. Inorganic and organic evolution. Evidences that are supporting to the evolution. Speciation and speciation models. Cultural evolution and human evolution.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)		Lec. Sevil ÖZCAN							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Evolution (2008) Douglas J. Futuyma (Trans. Aykut Kence, A. Nihat Bozcuk), Palme Publ.
2	Basic Rules of The Life Volume.1 / Part.1 (2004) Ali Demirsoy, Meteksan
3	Heredity and Evolution (2007) Ali Demirsoy, Meteksan

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of the evolution, and development and history of evolution concept.
2	Theoretical	Darwin's evolution theory and different opinions related to formation of the living organisms on earth.
3	Theoretical	Inorganic evolution, the opinions related to the formation of the solar system and Earth.
4	Theoretical	Organic evolution.
5	Theoretical	The crude material of evolution (mutation, recombination). The mechanisms that providing evolution (such as natural selection, selection based on the ability to reproduction, isolation, genetic drift).
6	Theoretical	The evidences that support to the evolution.
7	Theoretical	The evidences that support to the evolution.
8	Theoretical	The evidences that support to the evolution.
9	Theoretical	Models of the speciations.
10	Theoretical	Compliance, progressive evolution, parallel evolution, narrowing evolution. Pre-adaptation and some examples for important adaptation types.
11	Theoretical	Cladogenesis, Anagenesis and some species concepts. The situations that cause speciation by preventing the gene flowing.
12	Theoretical	In the context of the life- tree, monitoring the evolutionary path which is from the common ancestor of all living to Homo sapiens, and monitoring of the bifurcations due to evolution.
13	Theoretical	Evolution of the mitosis.
14	Theoretical	Cultural evolution.

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Midterm Examination	1	10	1	11



Final Examination	1	10	1	11
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Knows that organic and inorganic evolution.
2	Knows that mutations can occur in living organisms depending on the living conditions, and consequently knows that evolutionary changes can occur.
3	Knows that different theories about the formation of the living organisms.
4	Knows the basic evolutionary concepts such as mutation, variation and modification.
5	Knows different views about the formation of living things on earth.

Programme Outcomes (Medical Laboratory Techniques)

1	Understands the basic operation, organization, and safety rules of the medical laboratory; takes personal safety precautions and ensures a safe laboratory environment.
2	Accepts samples in the medical laboratory, performs pre-analysis preparation, ensures proper transfer conditions, and delivers results.
3	Performs basic tests in various fields of the medical laboratory, prepares analytical solutions, and effectively uses devices and techniques involved in the analysis process.
4	Applies disinfection and sterilization techniques, ensures laboratory hygiene, and complies with waste management procedures.
5	Evaluates and interprets the results of analyses and prepares laboratory reports in accordance with professional ethical principles.
6	Possesses fundamental knowledge of health sciences and effectively uses medical terminology in professional applications.
7	Communicates effectively in healthcare services, works well in teams, and uses Turkish proficiently; has a basic level of foreign language proficiency in professional applications. Embraces Atatürk's principles and reforms, adopts national, moral, spiritual, and cultural values, and maintains an open perspective toward universal and contemporary developments.
8	Keeps up with advancements in science and technology, continuously updates professional knowledge and skills, and engages in self-improvement.
9	Is aware of individual and public health, environmental protection, and occupational safety issues and fulfills responsibilities in these areas.
10	Possesses awareness of career management and lifelong learning within an academic context.

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	5	5	4
P2	4	5	4	5	4
P3	4	5	5	5	4
P4	4	5	4	5	5
P5	4	4	5	5	5
P6	3	4	3	5	4
P7	4	5	5	5	4
P8	4	4	5	5	5
P9	4	4	4	5	4
P10	3	4	4	4	4

