AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Evolution								
Course Code	ÇS309		Couse 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 *(Physiotherapy)*	
1	To be able to recall the information of research methods and statistics so as to follow the developments, monitor and interpret scientific literature
2	To have the appropriate knowledge of basic sciences at the level of interest, to use specific medical terms and terminology of physical therapy
3	To be able to recall knowledge of the general structure and proporties of musculoskeletal system and the joints and to evaluate the story of musculoskeletal diseases.
4	To be able to comprehend the methods of measurement of the range of motion of joints and to measure it.
5	To be able implement a general evaluation of posture analysis and gait analysis.
6	To be able to recall the knowledge about general characteristics of musculoskeletal diseases, osteoporosis, osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, especially rheumatic diseases, mechanical low back and neck pain, disc herniation, soft tissue disorders and to apply appropriate physiotherapy.
7	To be able to recall the knowledge and gain skills about the devices and the agents of heater used in physical therapy, indications and contraindications of using, and the necessary information about how to apply on patients.
8	To be able to recall the knowledge of the electromagnetic field.
9	To be able to recall what Elektroakapunktur, Laser, Biofeedback, cervical and lumbar traction systems, pneumatic compression therapy are, and how to apply them, which one is applicable to patients.
10	To be able to recall what manipulation-mobilization is and which patients are suitable for this application.
11	To be able to recall what massage and hydrotherapy treatments are and which patients are suitable for these applications.
12	To be able to gain the professional and ethical awareness, apply gained knowledge and skills in reallife situations and transfer gained knowlegde to individuals around her/his environment, and improve behavior of life-long learning.
13	To gain knowledge about methods of diagnosis, protection and treatment of diseases
14	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to neurological disorders.
15	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to cardiopulmonary disorders.
16	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to pediatric patients.
17	To be able to gain knowledge about the effects of fitness and exercise on metabolism and responses of body systems to them.
18	To have knowledge about rehabilitation services
19	To become individuals who can do interdisciplinary team work, with a sense of social responsibility and entrepreneur.
20	To be able to recall the knowledge about Ataturk's Principles and the History of Turkish Revolution.
21	To be able to gain the knowledge and ability to become contemporary individuals who can use Turkish language grammar well and know a foreign language knowledge necessasary to follow the developments in the profession.

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	5	5	5	5	5
P2	5	5	5	5	5
P3	3	3	3	3	3
P4	3	3	3	3	3
P5	1	1	1	1	1
P6	1	1	1	1	1
P7	1	1	1	1	1
P8	1	1	1	1	1

P9	1	1	1	1	1
P10	1	1	1	1	1
P11	1	1	1	1	1
P12	1	1	1	1	1
P13	1	1	1	1	1
P14	1	1	1	1	1
P15	1	1	1	1	1
P16	1	1	1	1	1
P17	1	1	1	1	1
P18	1	1	1	1	1
P19	4	4	4	5	5
P20	4	5	5	5	5
P21	4	5	5	5	5