



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Topics In Biology I							
Course Code		ÇS006		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To inform the students who are educated in the health field about the basic biology topics such as organic compounds, cell division, substance transition.							
Course Content		Distinction between viability – inanimate, organic and inorganic molecules that form the structure of living cells and organelles, substances through the membrane and metabolism, cell division (types, seen cells and varieties, etc.).							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Genetic (2003) William S. Klug & Michael R. Cummings (Trans. Prof. Cihan Öner), Palme Publishing
2	Basic Rules of Life: Volume.1 / Part.1 (2004) Ali Demirsoy, Meteksan
3	Biology (2000) William T. Keeton, James L. Gould & Carol Grant Gould (Trans. Prof. Ali Demirsoy, Prof. İsmail Türkan & Prof. Ertunç Gündüz) Palme publishing

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of Biology, related science branches and its working areas.
2	Theoretical	Differences between the live and lifeless.
3	Theoretical	Basic molecules involved in the structure of living things (inorganic).
4	Theoretical	Basic molecules involved in the structure of living things (organic).
5	Theoretical	Basic molecules involved in the structure of living things (organic).
6	Theoretical	Cell theory, cell variety and structure of the cell.
7	Theoretical	Midterm
8	Theoretical	Structure of the cell membrane and substances through the membrane.
9	Theoretical	Endoplasmic reticulum, Lysosome and Golgi apparatus.
10	Theoretical	Centrosome, Ribosome, Vacuole, Peroxisome.
11	Theoretical	Mitochondria, plastids and endosymbiosis theory.
12	Theoretical	The cell nucleus and its' role in the cell division, and cell cycle.
13	Theoretical	Bacterial Asexual reproduction (Binary fission) and mitosis.
14	Theoretical	Meiosis cell division.
15	Theoretical	Metabolism and Homeostasis.

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Individual Work	3	5	2	21
Midterm Examination	1	10	1	11
Final Examination	1	14	1	15
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	Knows the molecules that make up the structure of living things.
2	Knows the structure, division, feature and various of the cells.
3	Knows the current basic rules of the substance transition in the cell membrane and the metabolism.
4	Knows the basic Latin concepts.
5	Knows and defines to the cell divisions.

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 properties 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 Elektroakupunktur, 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 real life situations and transfer gained knowledge 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 Atatürk'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 necessary 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	4	4	4	4	4
P2	5	5	5	5	5
P3	3	3	3	3	3
P4	3	3	3	3	3
P5	3	3	3	3	3
P6	2	2	2	2	2
P7	2	2	2	2	2
P8	2	2	2	2	2
P9	2	2	2	2	2
P10	2	2	2	2	2
P11	2	2	2	2	2
P12	2	2	2	2	2
P13	2	2	2	2	2
P14	2	2	2	2	2



P15	2	2	2	2	2
P16	2	2	2	2	2
P17	2	2	2	2	2
P18	2	2	2	2	2
P19	5	5	5	5	5
P20	3	3	3	3	3
P21	4	4	4	4	4

