

# **AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM**

Course Title	General Biology						
Course Code	KZM105	Couse	Level	Short Cycle (Associate's Degree)			
ECTS Credit 4	Workload 96 (A	Hours) Theory	3	Practice	0	Laboratory	0
Objectives of the Course To recognize the working principles			of life on Earth	, diversity of liv	ring things and	d biological rules	of life.
Course Content	Cell membrane, fun formation in cell life, basis of heredity, th genomes, biotechno criteria used in their	, photosynthesis e connection be ology, biodiversit	and respiratory tween genes ar y, nomenclatur	/ events, meios nd proteins, vir e and classific	sis and sexual us and bacter ation of the liv	l life cycles, mole ial genetics, euka ing organisms; T	ecular aryotic The
Work Placement N/A							
Planned Learning Activitie	es and Teaching Metho	ods Explana	ation (Presenta	tion)			
Name of Lecturer(s)							

# Assessment Methods and Criteria

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

#### **Recommended or Required Reading**

Campbell, N.A. & Reece, J.B. Biyoloji. Altıncı baskıdan çeviri. Çeviri editörleri: Prof. Dr. Ertunç GÜNDÜZ, Prof. Dr. Ali DEMİRSOY, Prof. Dr. İsmail TÜRKAN, Palme Yayıncılık, 2006 1

Week	Weekly Detailed Cour	se Contents
1	Theoretical	The characteristics of living things, the organization of matter, the definition of the cell, the definition of diversity in life, the interests of biology, the life of the cell and chemical bonds
2	Theoretical	Inorganic and organic substances in the cell. Energy flow in cells and how cells control metabolic reactions. Structure and functions of the cell membrane
3	Theoretical	Comparison of prokaryotic and eukaryotic cells. Nucleus, organelles, chloroplast- Photosynthesis
4	Theoretical	Mitosis Cleavage, Meiosis and Sexual Life Cycles, Molecular Basis of Heredity, Link Between Genes and Proteins, RNA Synthesis and Processing, Protein Synthesis
5	Theoretical	Virus and Bacterial Genetics, Organization and Control of Eukaryotic Genomes
6	Theoretical	Gene Cloning, DNA Analysis and Genomics, Biotechnology
7	Theoretical	Classification and Fundamentals of Taxonomy, Prokaryotic Organisms, Classification of Prokaryotes, Form and Structure Variety of Bacteria, Reproduction, Life Environment and Its Importance for Human Health, Differences of Archae from Bacteria, Eukaryotic Organisms
8	Intermediate Exam	midterm examination
9	Theoretical	Protista, Slime Fungi, Unicellular Algae, Protozoons, General Features of Fungi, Reproduction of Fungi and Their Effects on Human Health, Properties of Plants and Evolutionary Origins, Liverwort and Mosses, Seedless and Seed Vein Plants
10	Theoretical	General Characteristics of Animals, Main Phylums, Sponges, Mollusks, Ringworms, Crustaceans, Spiders and Insects that make up the Animal Kingdom
11	Theoretical	Invertebrates, Tunics and Lancelates, Fish, Amphibians, Reptiles, Birds, Mammals
12	Theoretical	The Basics of Evolution
13	Theoretical	The Evolution of Organisms
14	Theoretical	The Origin of the Species
15	Theoretical	History of Life
16	Final Exam	Final exam

#### **Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	9	1	20
Midterm Examination	1	12	1	13



				Course information For
Final Examination	1	20	1	21
Total Workload (Hours)				
		[Total Workload	(Hours) / 25*] = <b>ECTS</b>	4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

Lean	
1	Understand the cell structure. Can explain prokaryotic and eukaryotic cell differences.
2	Explain cell membranes and substance transport from these membranes. Understands the energy cycle in the cell.
3	Can explain the structure and functions of microorganisms. Can group microorganisms. Define prokaryotic and eukaryotic organisms. Identify non-cellular microorganisms. Explain the useful and harmful functions of microorganisms.
4	Understand the structure and functions of plants. Can explain the properties of vegetative cells and tissues. Can explain the structure and properties of plant organs. Can explain photosynthesis.
5	Comprehend the origin of life, evolution of living things and general characteristics of living things.

# Programme Outcomes (Cosmetic Technology)

1	To define and classfify cosmetics.					
2	To learn the classification of cosmetic raw materials, purposes, products to use and what properties should be carried.					
3	To describe and classify toxicity, to learn toxic substances and analyze methods.					
4	To learn laboratory safety, to apply safety precautions when working with dangerous chemicals.					
5	To learn and apply necessary tests for cosmetic raw materials, intermediates and finished products.					
6	To perform a scientific study, analyze study and report results of study scientifically.					
7	To interpret experimental results, to evaluate data in point of cosmetic science.					
8	To act in accordance with the principles of ethics, to have awareness of professional and ethical responsibility.					
9	To be individuals who are committed to Atatürk's Principles and Revolutions, contemporary, democratic, secular, protecting and developing their country, protecting their nation, respecting human rights, protecting nature, non-discriminatory, adhering to their traditions and customs, and protecting their values.					
10	To be an individual who has completed his personal development, can adapt to society and contribute positively					

# Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High

	L1	L2	L3	L4	L5
P6	3	3	3	3	3