



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		General Biology							
Course Code		TL105		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	4	Practice	2	Laboratory	0
Objectives of the Course		Togain competency of performing General Biology Applications							
Course Content		The chemical structure of the cell(water, electrolytes,proteins, carbohydrates, lipids,enzymes, vitamins, hormones and nucleic acids),Biological structure of the cell (prokaryotic cell features,eukaryotic cell features, Gram (+) and Gram (-) features),The physical properties of the cell(diffusion, the solution type,the cell membrane transport,osmosis and dialysis)							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70
Practice Examination	1	10

Recommended or Required Reading

1	1. Genel Biyoloji Prof. Dr. İlhami Kızıroğlu; 1990 Ankara
2	2. Prof. Dr. Demirsoy A. Yaşamın Temel Kuralları, Hacettepe Üniversitesi Yayınları, Ankara, 1995.
3	3. Kadioğlu, A.; Kaya Y., Genel Botanik, Erzurum 2001.
4	4. Tatlı, Adem. Genel Biyoloji (Botanik), ETAM, Kütahya 1998.

Week	Weekly Detailed Course Contents	
1	Theoretical	The chemical structure of the cell (water, electrolytes)
2	Theoretical	The chemical structure of the cell (proteins, carbohydrates, lipids)
3	Theoretical	The chemical structure of the cell (enzymes, vitamins, hormones and nucleic acids)
4	Theoretical	Biological structure of the cell (eukaryotic cell membrane)
5	Theoretical	Biological structure of the cell (eukaryotic cell organelles-animal)
6	Theoretical	Biological structure of the cell (eukaryotic cell organelles-plant)
7	Theoretical	Biological structure of the cell (eukaryotic cell organelles-plant)
8	Intermediate Exam	Midterm exam
9	Theoretical	Biological structure of the cell (the differences between eukaryotic cells)
10	Theoretical	Biological structure of the cell (prokaryotic cell features)
11	Theoretical	Biological cell structure (Gram (+) and Gram (-) features)
12	Theoretical	The physical properties of the cell (diffusion, the solution type)
13	Theoretical	The physical properties of the cell (liquid systems in living organisms)
14	Theoretical	The physical properties of the cell (the cell membrane transport)
15	Theoretical	The physical properties of the cell (osmosis and dialysis)

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	4	70
Lecture - Practice	14	1	2	42
Assignment	4	1	1	8
Midterm Examination	1	2	1	3



Final Examination	1	1	1	2
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Knows the concepts of living and inanimate.
2	Knows the molecules that make up the structure of living things.
3	Knows the cell and its structure.
4	Knows cell division and classification of living things.
5	Prepare the preparation. Finds and examines the image under the microscope.

Programme Outcomes (Medical Laboratory Techniques)

1	To be able to have sufficient back ground in medical laboratory techniques and medical laboratory branches (biochemistry, microbiology, parasitology, sitogenetik etc.); the ability to use theoretical and practical knowledge in these fields.
2	To be able to have the basic theoretical and practical knowledge and other resources have been supported applications and tools based on secondary-level qualifications gained in the field of Medical Laboratory Techniques Program to-date text books containing formations
3	To be able to have basic knowledge about structure and function of systems in human, to analyse these data on tissue, cell and diseases.
4	To be able to analyse the medical samples necessary for physicians by using tools, equipment and techniques at the diagnostic and the therapeutic laboratories of health agencies and evaluate the data.
5	To be able to use the medical laboratory tools and equipments according to rules and techniques, and make controls and maintenance of them
6	To be able to perform basic tests of related different medical laboratories, prepare solutions.
7	To be able to perform proper sample collection and transport procedures for the medical laboratory tests from the patient.
8	To be able to perform preanalytical sample preparation procedure, prepare inspection preparations, perform disinfection and sterilization
9	To be able to interpret and evaluate data, define and analyze problems, develop solutions based on research and proofs by using acquired basic knowledge and skills with in the field.
10	To be able to have knowledge about work organization and carry out related practice in medical laboratories
11	To be able to carry out laboratory safety protocols, take individual safety precaution and create safe laboratory environment.
12	To be able to gain the ability to apply by viewing and evaluating the processes related to his/her fields in public and private sector.
13	To be able to gain the awareness of the necessity of life long learning, ability to follow developments in science and technology and self-renewal.
14	To be able to help laboratory experts and medical scientists for their researches
15	To be able to be aware of individual and public health, environmental protection and job security issues, understanding the basic level of the relationship.
16	To be able to grasp principles of Atatürk and their evolutions, to ensure national, ethical, spiritual and cultural values, to adopt to universal and contemporary developments
17	To be able to communicate efficiently for medical service and speak Turkish efficiently.
18	To be able to communicate in English at basic level, utilize foreign language on occupational practice
19	To have the appropriate knowledge of medical sciences at the level of interest, to use specific medical terms and terminology of field

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



P11	4	4	4	4	5
P12	5	5	5	5	5
P13	4	4	4	4	5
P14	5	5	5	5	5
P15	3	3	3	4	5
P16	4	5	4	4	5
P17	5	5	5	5	5
P18	5	5	5	5	5

