AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Medical Laboratory and Safety								
Course Code	TL103		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To take personal precautions, to identify the risks of physical, chemical and biological factors and to take proper preacutions for them while working in the laboratory								
Course Content	Use hazard signs in laboratory, Use the cabinets of biological safety, Take precautions against hazards by chemical, radioactive or in effective materials that are spilled on the body, Store the chemical matters, Take precautions for the hazards in result of bacteriologic material spills , Create a laboratory safety committee.								
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	1. Canel,M.(2003),Laboratuvar Güvenliği, A.Ü.Fen.Fak.Yayınları, Ankara Laboratuar Klavuzları Uygulama

Week	Weekly Detailed Course Contents	
1	Theoretical	Use hazard signs in laboratory To use gadgets designed to prevent laboratory hazards
2	Theoretical	Use the cabinets of biological safety
3	Theoretical	Use laboratory clothings Take precautions for the risks against eyes Take precautions for the risks against needle stings
4	Theoretical	Take precautions against hazards by chemical, radioactive or ineffective materials that are spilled on the body
5	Theoretical	Store the chemical matters Use hazardous chemical matters
6	Theoretical	Transfer various chemical matters Prevent the hazards in result of chemical matter spills
7	Theoretical	Take fire precautions in laboratory Take electrical hazard precautions in laboratory
8	Theoretical	Midterm exam
9	Theoretical	Take radioactive matter hazard precautions in laboratory Take precautions for the risks against natural disasters such as earthquakes, floods etc.
10	Theoretical	Take precautions for the hazards in result of bacteriologic material spills Take precautions for the hazards in result of virus included material spills
11	Theoretical	Take precautions for the possible bugs and rodents in laboratory
12	Theoretical	Create a laboratory safety committee
13	Theoretical	Set up a telephone network system for the possible laboratory hazards Make plans of extraordinary cases
14	Theoretical	Prepare a list of control for chemical factors Prepare a list of control for physical factors

15	Theoretical	Prepare a list of control for biological factors

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Midterm Examination	1	3	1	4
Final Examination	1	3	1	4
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. Identify the chemical hazards in laboratory and take precautions
2	2. Identify the physical hazards in laboratory and take precautions
3	3. Identify the biological hazards in laboratory and take precautions
4	4. Make safety organizations in laboratory
5	May write laboratory safety intsructions

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,sitogenetiketc.);the ability to use theoretical and practical knowledge in these fields.
2	To be able to have the basic theoretical and practical knowledgeand 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 boks 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 rapeutic laboratories of health agencies and evaluate the data.
5	To be able to use the medical laboratoy tools and equipments according to rules and technics, 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, under standing the basic level of the relationship.
16	To be able to grasp principles of Atatürk and there volutions, to ensurenational, 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	4
P2	4	4	4	4	4
P3	4	4	4	4	4
P4	4	4	4	4	4

P5	4	4	4	4	4
P6	4	4	4	4	4
P7	5	5	5	5	5
P8	5	5	5	5	5
P10	4	4	4	4	4
P11	5	5	5	5	5
P13	5	5	5	5	5
P14	5	5	5	5	5
P15	5	5	5	5	5