



AYDIN ADNAN MENDERES UNIVERSITY
AYDIN VOCATIONAL SCHOOL OF HEALTH SERVICES
MEDICAL SERVICES AND TECHNIQUES
MEDICAL LABORATORY TECHNIQUES
COURSE INFORMATION FORM

Course Title	Basic Laboratory Knowledge								
Course Code	TL101	Course Level			Short Cycle (Associate's Degree)				
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To gain The Knowledge And Skills And Rules Related With The Environmental And Human Health Protection								
Course Content	Working methods in the laboratory, Tools and equipment used in laboratory using and cleaning, The solution concentrations, Molarity and normality, buffer solutions, Basic operations, Volumetric analysis, instrumental analysis.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Ins. Mert SOYSAL								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Lecture notes, PowerPoint presentations, medical journals and publications
2	*Klinik Biyokimya Laboratuvarı El Kitabı, İ. Mehmetoğlu, Yelken Basım, 2004

Week	Weekly Detailed Course Contents	
1	Theoretical	Working methods in the laboratory
2	Theoretical	Microscopes, Measuring and weighing
3	Theoretical	Tools and equipment used in laboratory
4	Theoretical	Glass ware, tools and equipment cleaning
5	Theoretical	Sterilization and disinfection
6	Theoretical	The solution concentrations
7	Theoretical	Molarity and normality
8	Intermediate Exam	Midterm Exam
9	Theoretical	Acids, bases, salts
10	Theoretical	Buffer
11	Theoretical	Methods of sampling and culture from different parts of the body
12	Theoretical	Principles to be followed and analyzed the effects of the parameters of blood up take
13	Theoretical	The basic operations
14	Theoretical	Volumetric analysis
15	Theoretical	Instrumental analysis

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	14	0	1	14
Midterm Examination	1	2	1	3
Final Examination	1	4	1	5
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	1. Learning outcomes of the course unit
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2	2. Learn the operation of the laboratory
3	3. Knows the basic laboratory equipments
4	4. Knows the units and measuringsystems
5	5. Knows to prepare the solutions

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

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	4	4	4	4	4
P4	5	5	5	5	5
P5	5	5	5	5	5
P6	5	5	5	5	5
P7	4	4	4	4	4
P9	5	5	5	5	5
P10	4	4	4	4	4
P11	4	4	4	4	4
P13	5	5	5	5	5
P14	5	5	5	5	5
P15	5	5	5	5	5

