



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

Course Title	Biochemical Analysis								
Course Code	TL002	Course Level			Short Cycle (Associate's Degree)				
ECTS Credit	3	Workload	76 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	used for the detection of a disease, or to determine the desired amount of material identification.								
Course Content	In the field of Biochemistry and Clinical Biochemistry, biological materials, the diagnosis of disease, differential diagnosis, determining the severity of a disease								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study								
Name of Lecturer(s)	Ins. Tuğçe OKTAV								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	İnsan Biyokimyası, Tietz Klinik Kimyada Temel İlkeler. Palme Yayıncılık
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Week	Weekly Detailed Course Contents	
1	Theoretical	Qualitative (qualitative) analysis
2	Theoretical	Quantitative (quantitative) analysis
3	Theoretical	Quantification of Metabolites
4	Theoretical	Determination of the activity of the enzyme
5	Theoretical	Quantitation of Vitamins
6	Theoretical	Quantification of hormones
7	Theoretical	Loading tests
8	Intermediate Exam	Midterm
9	Theoretical	Chemical methods
10	Theoretical	Physical methods
11	Theoretical	Emergency analysis
12	Theoretical	Makromethods
13	Theoretical	Micromethods
14	Theoretical	Ultramikromethods
15	Theoretical	Ultramicromethods
16	Final Exam	Term

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	2	70
Midterm Examination	1	2	1	3
Final Examination	1	2	1	3
			Total Workload (Hours)	76
			[Total Workload (Hours) / 25*] = ECTS	3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Knows clinical biochemical analysis based organizations
2	Knows clinical biochemical analyzes of the substance to be investigated
3	Knows clinical biochemical analyzes according to the amount of material -Methods



4	The reagents used to (reagents, reagents) knows by clinical biochemical analysis
5	May identify laboratory safety and may apply laboratory safety rules

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

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
P3	5	5	5	5	5
P5	5	5	5	5	5
P7	5	5	5	5	5
P9	5	5	5	5	5
P10	5	5	5	5	5
P14	5	5	5	5	5

