AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Clinical Biochemistry Application I					
Course Code		TL215		Couse Level	Short Cycle (Associate's Degree)		
ECTS Credit	5	Workload	128 *(Hours)*	Theory	0	Practice	4	Laboratory	0
Objectives of the Course		Providing competencies concerning clinical biochemistry analysis and tests					
Course Content		Making tests for water and electrolyte metabolism,Making tests foracid-base balance,Making testsfordiseases of carbohydrate metabolism,Making tests for diseases of lipid metabolism,Making tests for protein metabolism, Making tests for liver function,Making tests for heart function, Making tests forkidney function,Making tests for the gastrointestinal system functions, Making male urogenitalsystem-specific tests Making tests related to bone metabolism,Determination of tumor markers,Making analysis of body fluids					
Work Placement		N/A					
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study				
Name of Lecturer(s)							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Practice Examination	1	110

Recommended or Required Reading

1	Klinik Biyokimya, Bahattin Adam, Nobel Tıp Kitabevleri, 2000
2	Klinik Biyokimya Analiz Metodları, Bahattin Adam ve Yasemin Ardıçoğlu, Atlas Kitapçılık, 2002
3	Klinik Biyokimya Laboratuvarı El Kitabı, Idris Mehmetoğlu, Nobel Tıp Kitabevleri, 2007

Week	Weekly Detailed Course Contents	
1	Practice	Making tests for water and electrolyte metabolism
2	Practice	Making tests for acid-basebalance
3	Practice	Making tests for diseases of carbohydrate metabolism
4	Practice	Making tests for diseases of lipid metabolism
5	Practice	Making tests for protein metabolism
6	Practice	Making tests for liver function
7	Practice	Making tests for heart function
8	Practice	Making tests for kidney function
9	Practice	Making tests for the gastrointestinal system functions
10	Practice	Making tests related to bone metabolism
11	Practice	Making male urogenitalsystem-specific tests
12	Practice	Monitoring of therapeutic drug level
13	Practice	Determination of tumor markers
14	Practice	Making analysis of body fluids
15	Practice	Practice Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Practice	14	5	4	126
Practice Examination	1	1	1	2
			Total Workload (Hours)	128
			[Total Workload (Hours) / 25*] = **ECTS**	5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Making tests for water and electrolyte metabolism
2	Making tests for acid-basebalance
3	Making tests for diseases of carbohydrate metabolism
4	Making tests for diseases of lipid metabolism
5	Making tests for protein metabolism
6	Making tests for liver function
7	Making tests for heart function
8	Making tests for kindey function
9	Making tests for the gastrointestinal system functions
10	Making tests related to bone metabolism
11	Monitoring of therapeutic drug level
12	Determination of tumor markers
13	Making analysis of body fluids

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	L6	L7	L8	L9	L10	L11	L12	L13
P1	5	5	5	5	5	5	5	5	5	5	5	5	5
P2	5	5	5	5	5	5	5	5	5	5	5	5	5
P3	5	5	5	5	5	5	5	5	5	5	5	5	5
P4	5	5	5	5	5	5	5	5	5	5	5	5	5
P5	5	5	5	5	5	5	5	5	5	5	5	5	5
P6	5	5	5	5	5	5	5	5	5	5	5	5	5
P7	5	5	5	5	5	5	5	5	5	5	5	5	5

P8	5	5	5	5	5	5	5	5	5	5	5	5
P9	5	5	5	5	5	5	5	5	5	5	5	5
P10	5	5	5	5	5	5	5	5	5	5	5	5
P11	5	5	5	5	5	5	5	5	5	5	5	5
P12	3	3	3	3	3	3	3	3	3	3	3	3
P13	5	5	5	5	5	5	5	5	5	5	5	5
P14	3	3	3	3	3	3	3	3	3	3	3	3
P15	5	5	5	5	5	5	5	5	5	5	5	5