AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Blood Biochemistry						
Course Code	TL306		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	76 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Whole blood, a complete blood count (Cbc) and blood Biochemistry-related General parameters and to have knowledge about the results intended.						
Course Content	Whole blood and reference values, research methods, IMI and causes abnormal status Blood biochemistry reference values, research methods, IMI and causes abnormal status						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Case Study, Individual Study				
Name of Lecturer(s)							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Klinik Biyokimya Laboratuvarı El Kitabı, Idris Mehmetoğlu, Nobel Tıp Kitabevleri, 2007

Week	Weekly Detailed Course Contents	
1	Theoretical	Blood, composition and functions and General blood tests
2	Theoretical	Whole blood (Total blood), blood samples must be taken of
3	Theoretical	Blood count (Hemogram) reference values, analysis methods, pathologies
4	Theoretical	Sedimentation reference values, analysis methods, pathologies,
5	Theoretical	The Hemoglobin reference values, the hemotocrit., analysis methods, pathologies
6	Theoretical	Bleeding clotting factors.APTT,ACT,PT,APZ reference values, analysis methods, pathologies
7	Theoretical	Blood Enzymes (liver, kidney, heart), reference values, analysis methods, pathologies
8	Theoretical	Lipitler and analysis of reference values, analysis methods, pathologies
9	Theoretical	Determination of blood Groups and blood transfusions before testing
10	Theoretical	Hormone analysis reference values, analysis methods, pathologies
11	Theoretical	Acute phase proteins are reference values, analysis methods, pathologies
12	Theoretical	Hepatitis markers and interpretation
13	Theoretical	Tumor markers and interpretation
14	Theoretical	Other body fluids and the reference values, analysis methods, pathologies

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	2	0	5	10
Seminar	3	0	5	15
Midterm Examination	1	7	1	8
Final Examination	1	14	1	15
			Total Workload (Hours)	76
			[Total Workload (Hours) / 25*] = **ECTS**	3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	The simplest level at the end of the course the students complete blood and blood biochemistry parameters must have basic knowledge about
2	Understand the basic principles of biochemistry, to recognize the remarkable points on taking the blood sample

3	May identfy laboratory safety and may apply laboratury safety rules
4	Hormones the definition, classification, metabolism and the relationship between laboratory tests and disease
5	Hemoglobin-Porpyrin the definition, metabolism and the relationship between laboratory tests and disease

Programme Outcomes *(Physiotherapy)*

1	To be able to recall the information of research methods and statistics so as to follow the developments, monitor and interpret scientific literature
2	To have the appropriate knowledge of basic sciences at the level of interest, to use specific medical terms and terminology of physical therapy
3	To be able to recall knowledge of the general structure and proporties of musculoskeletal system and the joints and to evaluate the story of musculoskeletal diseases.
4	To be able to comprehend the methods of measurement of the range of motion of joints and to measure it.
5	To be able implement a general evaluation of posture analysis and gait analysis.
6	To be able to recall the knowledge about general characteristics of musculoskeletal diseases, osteoporosis, osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, especially rheumatic diseases, mechanical low back and neck pain, disc herniation, soft tissue disorders and to apply appropriate physiotherapy.
7	To be able to recall the knowledge and gain skills about the devices and the agents of heater used in physical therapy, indications and contraindications of using, and the necessary information about how to apply on patients.
8	To be able to recall the knowledge of the electromagnetic field.
9	To be able to recall what Elektroakapunktur, Laser, Biofeedback, cervical and lumbar traction systems, pneumatic compression therapy are, and how to apply them, which one is applicable to patients.
10	To be able to recall what manipulation-mobilization is and which patients are suitable for this application.
11	To be able to recall what massage and hydrotherapy treatments are and which patients are suitable for these applications.
12	To be able to gain the professional and ethical awareness, apply gained knowledge and skills in reallife situations and transfer gained knowlegde to individuals around her/his environment, and improve behavior of life-long learning.
13	To gain knowledge about methods of diagnosis, protection and treatment of diseases
14	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to neurological disorders.
15	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to cardiopulmonary disorders.
16	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to pediatric patients.
17	To be able to gain knowledge about the effects of fitness and exercise on metabolism and responses of body systems to them.
18	To have knowledge about rehabilitation services
19	To become individuals who can do interdisciplinary team work, with a sense of social responsibility and entrepreneur.
20	To be able to recall the knowledge about Ataturk's Principles and the History of Turkish Revolution.
21	To be able to gain the knowledge and ability to become contemporary individuals who can use Turkish language grammar well and know a foreign language knowledge necessasary to follow the developments in the profession.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P17	2	2	2	2	2