AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Research Methods and Techniques								
Course Code	FZ070		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	2	Workload	53 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Examination of the research process, examination of the main research methods and usage patterns, literature research, collection of data, evaluation of data and create a report, using of simple statistical values								
Course Content	Research of literature, collection and evaluation of data, create a report, learning of simple statistical calculations.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Project Based Study								
Name of Lecturer(s)	Assoc. Prof. Erman ORYAŞIN, Ins. Hanife Gül BOZKURT, Lec. Mert SOYSAL								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Prof. Dr. Kazım Özdamar, Modern Scientific Research Methods, 3.Baskı
2	James N. Miller & Jane C. Miller, Statistics and Chemometrics for Analytical Chemistry, 6th Edition

Week	Weekly Detailed Course Contents	
1	Theoretical	Science and İnformation
2	Theoretical	Scientific research
3	Theoretical	Access to scientific information
4	Theoretical	Approach to research
5	Theoretical	Data collection tools
6	Theoretical	Simple statistical calculations
7	Theoretical	Example problem solving
8	Intermediate Exam	Midterm
9	Theoretical	Example problem solving
10	Theoretical	Data - Confidence limits
11	Theoretical	Data - Confidence limits
12	Theoretical	Example problem solving
13	Theoretical	Example problem solving
14	Theoretical	Example problem solving
15	Theoretical	Example problem solving

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Midterm Examination	1	10	0	10
Final Examination	1	15	0	15
			Total Workload (Hours)	53
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Recognition of the research process
2	Determination of the paths to be followed in the research process

3	Research data collection and evaluation process
4	Reporting the research results in accordance with the general rules
5	Presentation of prepared reports

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
P2	2	2	2	2	2
P6	4	4	4	4	4
P7	4	4	4	4	4
P8	2	2	2	2	2
P9	5	5	5	5	5
P13	3	3	3	3	3
P14	5	5	5	5	5