



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Research Methods and Techniques							
Course Code		FZ070		Course 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 Information
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 Imaging Techniques)**

1	To be able to get information the working principles of Radiology, Nuclear Medicine and Radiotherapy devices, and distinguish their components, use these devices in accordance with operating instructions.
2	To be able to perform the procedures in accordance with the examination of Radiology and Nuclear Medicine imaging .
3	To be able to apply the radiotherapy treatment, planned by radiation physicist with instruction of radiotherapist.
4	To be able to develop and perform the film printing of the images that obtained by imaging techniques of Radiology, Nuclear Medicine
5	To be able to evaluate the images that obtained by imaging techniques of Radiology, Nuclear Medicine in terms of radiographic quality and takes the necessary measures.
6	To be able to know the medical and radiologic terminology, and pronounce and use them correctly
7	To be able to take the necessary measures in accordance with the rules of Radiation safety and protection from radiation, and apply them.
8	To be able to distinguish the anatomical structures on images, obtained by the conventional and cross-sectional imaging techniques of Radiology, Nuclear medicine.
9	To be able to communicate well with patient, their family and the hospital staff.
10	To be able to move with own professional duties, powers and responsibilities of the consciousness and apply the rules of professional ethics.
11	To be able to adapt to a multi-disciplinary team work.
12	To be able to have a basic knowledge of human physiology.
13	To be able to distinguish anatomical structures.
14	To be able to establish a cause-and-effect relationship between events.
15	To be able to have the ability of analytical thinking and problem solving.
16	To be able to apply the basic principles of first aid.
17	It has basic knowledge about human anatomy
18	Understanding the basic concepts and principles of physics while providing, in the medical field and in particular medical imaging students better understand the issues involving technical vocational courses
19	OHS 'basic concepts; work accidents, occupational diseases, occupational physicians, occupational safety specialist, İSGB, OSGB, hazard classes, risk assessment, OHS employee representatives is
20	Have basic knowledge about basic medical practices and makes applications

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

	L1	L2	L3	L4	L5
P6	3	3	3	3	3
P10	2	2	2	2	2
P11	3	3	3	3	3
P14	5	5	5	5	5
P15	5	5	5	5	5

