



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Nükleer Medicine							
Course Code		TIP256		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	73 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to teach students; Gamma Camera and PET-CT imaging in classrooms and hospital environments To gain knowledge and skills about techniques.							
Course Content		Radiation protection and dosimetry in Nuclear Medicine Physics, SPECT and PET applications, Radiopharmaceuticals, Gamma Camera and PET / BT operating principles, Gamma camera and PET / BT quality control methods, Dose calibrator and quality control methods, Bone scintigraphy, Lung Perfusion / Ventilation scintigraphy, Endocrine and Central Nervous System Scintigraphy, Urogenital System scintigraphy, Gastrointestinal system scintigraphy, Heart scintigraphy and Cardiac stress and imaging protocols, Positron Emission Tomography (PET / CT) Applications.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)									

### Prerequisites & Co-requisites

Equivalent Course	TG204
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### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	Nükleer Tıp Teknisyen Notları
2	Nükleer Tıp Fiziği ve Klinik Uygulamalar

Week	Weekly Detailed Course Contents	
1	Theoretical	Nükleer Tıp temel kavramlarını tanımlar ve açıklar.
2	Theoretical	Radyasyonun Biyolojik etkileri, SPECT ve PET uygulamalarında radyasyondan korunma ve dozimetri kullanma
3	Theoretical	Radyofarmasötiklerin kullanımı
4	Theoretical	Gama kamera ve PET/BT çalışma prensipleri, kalite kontrol testleri
5	Theoretical	Kemik sintigrafileri, teknik ve prensipleri
6	Theoretical	Endokrin ve santral sinir sistemi sintigrafileri uygulama prensipleri
7	Theoretical	Akciğer perfüzyon-ventilasyon ve myokard perfüzyon sintigrafisi uygulama prensipleri
8	Intermediate Exam	Ara sınav
10	Theoretical	Gastrointestinal sistemde sintigrafik yöntemler
11	Theoretical	Enfeksiyon ve tümör görüntüleme yöntemleri
12	Theoretical	PET-CT hasta hazırlığı
13	Theoretical	PET-CT klinik uygulamaları
14	Theoretical	PET-CT klinik uygulamaları
15	Theoretical	Böbrek sintigrafileri
16	Final Exam	Dönem sonu sınavı
17	Final Exam	Dönem sonu sınav

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Individual Work	5	1	2	15
Midterm Examination	1	7	1	8



Final Examination	1	7	1	8
Total Workload (Hours)				73
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	
2	
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### Programme Outcomes (Medical Imaging Techniques)

1	THE ANATOMICAL STRUCTURE
2	HUMAN PHYSIOLOGY
3	APPLY FIRST AID FOR PATIENTS OR INJURIES
4	MAKING RADIOGRAPHY AND FILM BATHROOM, PRINTING PROCESSES
5	MAKING FLOROSCOPIC IMAGING
6	MAKING THE MAMOGRAPHY TEST
7	DOING ANGIOGRAPHY
8	MAKING MAGNETIC RESONANCE IMAGING (MRI)
9	MAKING COMPUTERIZED TOMOGRAPHY (CT) ANALYSIS
10	DOING THE BONE MINERAL DANCEITOMETER (DEXA)
11	ULTRASONOGRAPHY (USG)
12	GAMA CAMERA IMAGING
13	RADIOTHERAPY SIMULATION AND APPLICATION
14	RADIATION SAFETY AND RADIATION PROTECTION
15	MAKING BUSINESS ORGANIZATION AND PROVIDING PROFESSIONAL DEVELOPMENT
16	KEEPING RADIOLOGICAL ANATOMY
17	KEEPING MEDICAL TERMS
18	To be able to use modern Turkish language knowledge and language skills.
19	To have knowledge about Atatürk's Principles and Revolution History
20	To communicate at a basic level in a foreign language
21	Knows cancer and its types. Know what needs to be done to prevent cancer
22	To increase student's awareness of gender equality
23	To have information about clinical biochemistry
24	Knows the structure of proteins, carbohydrates and fats
25	To know family planning methods
26	To obey occupational ethic principals
27	To know occupational ethics
28	Understand the importance of teamwork
29	The organizational chart of the institution will be able to understand.
30	Will understand the importance of record keeping.
31	To know the ethical dilemmas in health
32	TTTo gain educational and exploratory knowledge about control and protection against infectious diseases
33	To evaluate the general condition of the patient or the injured to take the initiative
34	To know the indications and contraindications of contrast agents
35	To be able to use and maintain the right communication skills with patients and relatives
36	To be able to communicate with colleagues, patient and patient relatives at therapeutic level
37	To evaluate the behavior of patients and their relatives
39	To have general information about health system
40	To learn the rights and obligations of health workers



41	Ability to gain theoretical knowledge about disaster recovery
42	To gain practical knowledge about disaster recovery and to be able to use them in accordance with ethical principles
43	To be able to explain the concepts related to substance abuse
44	Identify the needs of individuals with substance addiction
45	Working organization
46	Prepare promotional material with ready template
47	To be able to prepare personal web site
48	Knows pharmacological agents. know how to apply the drugs according to the indications and contraindications
49	To have knowledge about the effects of radiation on environment and human health.
50	Knows the concepts of quality standards, quality, standardization, standards and accreditation in health.
51	To know the rules of ergonomics
52	To learn the rules of behavior in social and business life
53	Ensuring the development of social sensitivity levels
54	To use their personal knowledge, skills and experiences for the benefit of the society as a team
55	Will be able to apply the basic tasks to use the operating system
56	Demonstrate behavior by understanding the information given about health.
57	Know the learning and teaching methods
58	Will have the ability to prepare educational material and conduct effective training.

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

	L2	L4	L5	L6
P12		5	5	5
P14	5			

