

This is the curriculum to be implemented starting from the 2025-2026 academic year for the Medical Imaging Techniques Program, Medical Services and Techniques Department, Vocational School of Health Services															
FIRST YEAR															
I. Semester								II. Semester							
Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS	Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS
TRD109	TRD109	Turkish Language-I	C	2	0	2	2	TRD110	TRD110	Turkish Language-II	C	2	0	2	2
YDİ107	YDİ107	English-I	C	2	0	2	2	YDİ108	YDİ108	English-II	C	2	0	2	2
TGT103	TGT1101	Radiological Examination	C	2	4	4	4	TGT102	TGT1102	X-Ray Physics	C	2	0	2	4
SHM103	TGT1103	Physiology	C	2	0	2	3	TGT104	TGT1104	Pharmacology of Contrast Agents	C	1	2	2	2
SHM101	TGT1105	Anatomy	C	2	0	2	3	TGT205	TGT1106	Basic Radiotherapy	C	3	0	3	4
SHM107	TGT1107	Medical Biology and Genetics	C	2	0	2	2	TGT118	TGT1108	Contrast-Enhanced Radiological Imaging	C	2	4	4	6
SHM121	TGT1109	Basic Biochemistry	C	2	0	2	2	SHM134	TGT1110	Microbiology	C	2	0	2	3
ENF101	TGT1111	Basic Information Technologies	C	2	2	3	3			Field Elective Course-II	E	2	0	2	4
TGT105	TGT1113	Biophysics	C	2	0	2	2		SSD1102	Social Elective Course-II	E	2	0	2	3
		Field Elective Course-I	E	2	0	2	4								
	SSD1101	Social Elective Course-I	E	2	0	2	3								
		Term Total		22	6	25	30			Term Total		18	6	21	30

SECOND YEAR															
III. Semester								IV. Semester							
Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS	Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS
AİT209	AİT209	Atatürk's Principles and History of Reforms-I	C	2	0	2	2	AİT210	AİT210	Atatürk's Principles and History of Reforms-II	C	2	0	2	2
SHM211	TGT2101	Public Health	C	2	0	2	2	TGT202	TGT2102	Radiological Techniques-II	C	4	6	7	8
SHM213	TGT2103	First Aid	C	2	0	2	2	TGT204	TGT2104	Emergency X-Ray Applications	C	2	6	5	6
TGT213	TGT2105	Nuclear Medicine	C	2	0	2	3	SHM226	TGT2106	Interpersonal Relations	C	2	0	2	2
TGT207	TGT2107	Radiation Health and Protection	C	2	0	2	3	SHM222	TGT2108	Medical Ethics and Deontology	C	2	0	2	2
TGT209	TGT2109	Medical Documentation and Archival Information	C	2	0	2	2	SHM220	TGT2110	Disease Knowledge	C	2	0	2	2
TGT211	TGT2111	Radiological Techniques-I	C	2	6	5	8			Field Elective Course -IV	E	2	0	2	4
		Field Elective Course-III	E	2	0	2	4			Field Elective Course -IV	E	2	0	2	4
		Field Elective Course-III	E	2	0	2	4								
		Term Total		18	6	21	30			Term Total		18	12	24	30

FIELD ELECTIVE COURSE LIST															
FIRST YEAR															
I. Semester								II. Semester							
Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS	Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS
	SHM1101	Medical Terminology	E	2	0	2	4		SHM1102	Quality and Accreditation in Healthcare	E	2	0	2	4
	SHM1103	Infectious Diseases	E	2	0	2	4		SHM1104	Sterilization	E	2	0	2	4
SECOND YEAR															
III. Semester								IV. Semester							
Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS	Current Course Code	Proposed Course Code	Course Name	Compulsory / Elective	T	P	C	ECTS
	SHM2101	Environmental Protection	E	2	0	2	4		SHM2104	Crisis Management and Anger Control	E	2	0	2	4
	SHM2103	Occupational Safety	E	2	0	2	4		SHM2106	Rational Drug Use	E	2	0	2	4
	SHM2105	Health Institutions Management	E	2	0	2	4		SHM2108	Blood Banking and Transfusion	E	2	0	2	4

Total Theoretical Course Hours	76
Total Practical Course Hours	30
Total Credit	91
Total Course Hours	106
Total ECTS Credits	120
Practical Ratio	28,30

I. SEMESTER
COMPULSORY COURSE POOL CONTENTS

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TRD109		Turkish Language-I			C	2	0	2	2
DERS İZLENESİ									
Diploma Programının Adı: Tıbbi GÖRÜNTÜLEME TEKNİKLERİ					Dersin Kodu: TRD109				
					Dersin Adı: Türk Dili-I				
Yarıyıl	Teorik Saati	Uygulama Saati	Laboratuvar Saati	Kredisi	AKTS	Öğretim Dili	Türü: (Zorunlu/Seçmeli)		
1/Güz	2	-	-	2	2	Türkçe	Zorunlu		
Derse kabul koşulları (Ön Koşul, Bağlantı Koşul)		Bulunmuyor							
Derse Devam Zorunluluğu		Teorik			Uygulama		Laboratuvar		
		% 70			0		0		
Dersi Veren(ler)									
Dersin Öğretim Yöntemi		Anlatım, Tartışma, Soru-Yanıt, Örnek Olay İncelemesi, Sunum ve Laboratuvar Uygulamaları							
Kaynaklar		Türk Dili, Anadolu Üniversitesi Yayınları, No:786, Eskişehir, 2003. Türk Dili Sözlü ve Yazılı Anlatım, Uğur, A., Ekspres Matbaası, Kütahya, 2002. Sözlü ve Yazılı Anlatım, Anadolu Üniversitesi Yayınları, No: 1073. Eskişehir, 1998. Uygulamalı Türkçe Bilgileri, Göker, O., Evos Basım Yayın, Ankara, 2001.							
Ders Materyali (Yardımcı ekipman, maket vb)									
Dersin Amacı		Dilin özelliklerini ve sosyal hayattaki yerini kavratmak; Türkçenin tarihî dönemlerini öğretmek; Türkçenin ses ve şekil yapısını kavratıp, imlâ-noktalama işaretlerinin yerinde kullanılmasını sağlamak; anlam ve görevleri bakımında kelimeleri öğretmek; topluluk önünde sunum yapabilme becerisini kazandırmaktır.							
Dersin İçeriği		Dil Kavramı, Dilin Sosyal Bir Yapı Olarak Toplum Hayatındaki Yeri ve Önemi, Dil-Kültür İlişkisi, Kültür-Uygarlık İlişkisi, Türkçenin Dünya Dilleri Arasındaki Yeri ve Tarihi Gelişimi, Sanat-Yaratıcılık ve Toplum, Türkiye Türkçesinin Grameri (Türkçe'nin Ses Özellikleri ve Ses Bilgisi ile İlgili Kurallar, Hece Bilgisi, İmla Kuralları ve Uygulaması, Noktalama İşaretleri ve Uygulaması).							
Dersin Öğrenme Çıktıları		Karşılaşılan metinlerin türlerini ve özelliklerini öğrenir. Kompozisyon bilgilerini teorik ve uygulamalı olarak öğrenir. Yazılı anlatım türlerini öğrenir. Türlere uygun metin oluşturma ve oluşturulmuş metinler üzerinde uygulama yapma becerisi kazanır. Anlatım biçimleri ve yazılı anlatım türlerindeki uygunlukları öğrenir.							
DERSİN DEĞERLENDİRME SİSTEMİ					Sayı		Katkı Payı (%)		
Ödevler									
Sunum									
Ara sınavlar					1		40		
Proje									
Klinik Uygulama									
Laboratuvar									
Arazi Çalışması									
Diğer Uygulamalar									
Kısa Sınavlar									
Dönem Odevi / Projesi									
Port folyo Çalışmaları									
Raporlar									
Öğrenme Günlükleri									
Bitirme Tezi/Projesi									
Seminer									
Yarıyıl Sonu Sınavı					1		60		
Diğer (sözlü vb.)									
Toplam:					2		100		
Yarıyıl İçi Çalışmaların Başarı Notuna Katkısı:							40		
Yarıyıl Sonu Sınavının Başarı Notuna Katkısı:							60		

Derslerin sürekli iyileştirilmesi bağlamında (anket, mülakat, vb.) ön görülen ölçme ve değerlendirme araçları nelerdir ve hangi amaca yönelik uygulanmaktadır? Tanımlayınız (hedef ve amaç belirleme/ders içeriği/öğrenim ihtiyaçları/öğrenim ortamının düzenlenmesi/konuların sıralanışı ve bağıntısı/ materyal ve yöntemler/ölçme planlamasının değerlendirilmesi)	Öğrenci ders ve öğretim üyesi anket değerlendirme sonuçlarına göre iyileştirme düzenlenebilir.
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AKTS - İŞ YÜKÜ TABLOSU

DERSİN DEĞERLENDİRME SİSTEMİ	Sayı	Süre	Kredi
		(Saat)	İş Yüğü
Ders Süresi	14	2	28
Sınıf Dışı Çalışma Süresi	14	2	28
Odevler			
Sunum			
Ara sınavlar	1	1	1
Proje			
Klinik Uygulama			
Laboratuvar			
Arazi Çalışması			
Diğer Uygulamalar			
Yarıyıl Sonu Sınavı	1	1	1
Kısa Sınavlar			
Dönem Odevi/Projesi			
Port folyo Çalışmaları			
Raporlar			
Öğrenme Günlükleri			
Bitirme Tezi/Projesi			
Seminer			
Diğer			
Kredi İş Yüğü			58
Kredi İş Yüğü / 30			1,93
Dersin AKTS Kredisi			2

DERS KATEGORİSİ

HAFTALIK KONU BAŞLIKLARI

Hafta	Dersin Teorik Konu Başlıkları	Dersin Uygulama Konu Başlıkları
1	Dilin tanımı ve özellikleri, dilin sosyal hayatımızdaki yeri ve önemi. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. Noktanın kullanıldığı yerler.	
2	Dil-düşünce, dil-millet, dil-kültür bağlantısı; kültürün tanımı. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. Virgölün kullanıldığı yerler.	
3	Yeryüzündeki diller, kaynak (menş) bakımından dünya dilleri, yapı bakımından dünya dilleri, dil farklılaşması; yazı dili, konuşma dili (lehçe, şive, ağız). Dilekçe. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları.	
4	Türkçenin dünya dilleri arasındaki yeri, Türk dilinin tarihçesi.	
5	Öz geçmiş. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. Büyük harflerin kullanıldığı yerler.	
6	Türk dilinin gelişimi. Altay Devri, En Eski Türkçe, İlk Türkçe, Eski Türkçe. Göktürk Yazıtları. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. Yabancı kelimelere Türkçe karşılıklar.	
7	Türk dilinin gelişimi; Yeni Türkçe, Modern Türkçe. Lehçe, Şive, Ağız. Türk dilinin bugünkü durumu ve yayılma alanları, Türklerin günümüze kadar kullandığı alfabeler, dil bilimi. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamalar.	
8	Ara Sınav (Vize)	Ara sınav (Vize)
9	Ses Bilgisi. Ses hadiseleri; ses türemesi, ses düşmesi, ünlü değişmesi, benzeşme. Türkçe kelimelerdeki başlıca ses uyumları. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları	
10	Genel uygulama	
11	Anlam ve görevleri bakımından kelimeler. İsimler, zamirler. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları.	

	“Ki” bağlacı ve “ki” aitlik ekinin yazılışları.					
12	Anlam ve görevleri bakımından kelimeler. İsimler, zamirler. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. “Ki” bağlacı ve “ki” aitlik ekinin yazılışları.					
13	Anlam ve görevleri bakımından kelimeler. Sıfatlar, zarflar. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. İki nokta üst üste.					
14	Anlam ve görevleri bakımından kelimeler. Edatlar, fiilimsiler. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. Mı, mi, mu, mü soru edatının yazılışı. Fiiller; fiil çekimleri, fiil kipleri, fiillerde kişi. Ek fiil. Yapılarına göre fiiller, yardımcı fiiller, birleşik fiiller. Sunum, şiir, deneme, kompozisyon, hikâye, gazete, dergi çalışmaları ve uygulamaları, kitap tanıtımları. Da, de bağlacının yazılışı					
15	Ders içeriğinin ve konuların kısa bir değerlendirilmesi					
16	Genel Sınav	Genel Sınav (Final)				
DERSİN ÖĞRENİM ÇIKTILARININ PROGRAM YETERLİLİKLERİ İLE İLİŞKİSİ						
No	PROGRAM YETERLİLİKLERİ					
		1	2	3	4	5
1	Kitap okuma alışkanlığını kazanır, günlük gazete ve diğer süreli yayınları takip eder.				X	
2	Çevresindeki dil kirliliğine yol açan kelimelerin dil üzerindeki etkilerini hesaplar, kültürün dil üzerindeki etkisini görür.			X		
3	Türkçeyi doğru, güzel ve başarılı bir üslupla konuşur.				X	
4	Topluluk önünde sunum yapar, bilgi ve düşüncelerini başkalarının anlayabileceği düzeyde ifade eder, etkili iletişimi kullanır.			X		
5	Dünya dilleri içerisinde Türk dilinin büyüklüğünü bilir ve Türkçeyi bilim dili olarak kullanır. Türk dilinin ses yapısını ve tarihî yapısını bilir.				X	
Katkı Derecesi		1 Çok Düşük	2 Düşük	3 Orta	4 Yüksek	5 Çok yüksek
Dersin Öğrenme Çıktılarının Program Yeterliliklerine Katkısını Açıklayınız.		Program yeterliliklerinden 2 ve 4’e orta, 1,3 ve 5’e yüksek düzeyde katkısı bulunmaktadır				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
YDİ107		English-I			C	2	0	2	2
COURSE INFORMATION									
Name of Diploma Program: Medical imaging techniques					Course Code: YDİ107				
					Course Name: English				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type Compulsory /Elective	
1	2	4	-	2	4	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		% 70			0		0		
Lecturer(s)									
Course Teaching Method		Lecture, Discussion, Question and Answer, Case Study and Presentation							
References		- Full Steam Ahead, 8th ed., Gündüz Education and Publishing, Ankara. Turkish-English Dictionary							
Course Material (Auxiliary equipment, models etc.)									
Objective of the Course		With this course, students; In A1 level English for undergraduate level - To have basic grammar, To understand short and clear listening, To be able to speak in simple sentences, To understand the short and simple pieces they read, It is aimed to express themselves in simple sentences in writing.							
Course Content		To be able to meet, to say their name, age and place of residence and to ask the other person for the same information, to express months, days and seasons, to ask for the time and to answer formally or informally; expressing the actions that occur at the time of speech with positive/negative/interrogative sentences, the use of question words such as 'Who, What, Where, When'; constructing positive/negative/ interrogative sentences using the present tense, talking about timelines, the use of tense prepositions such as 'in/on/at'; talking about actions that we can or cannot do with the constructions 'can and can't', the use of personal pronouns and possessive adjectives, expressing the situations of necessity, prohibition or disappearance of necessity with structures such as 'must/ mustn't/ don't-doesn't have to'; Expressing ownership using 'have got/ has got' constructions, 'How much...?' and 'How many...?' asking quantity and quantity using question patterns, answering using 'a lot of/ much/ many' quantifiers.							
Learning Outcomes of the Course		-Has a basic knowledge of a foreign language sufficient for the field. -Can comprehend short, clear messages. -Can comprehend short, daily texts. -Can write short, simple notes and messages							
COURSE EVALUATION SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm exams					1		40		
Project									
Clinical Practise									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Other (oral etc.)									
Total:					2		100		
Contribution of In Semester-Activities to the Final Grade:							40		
Contribution of the Final Exam to Final Grade:							60		

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g. surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting/ course content/learning needs/organization of the learning environment/sequence and correlation of topics/materials and methods/evaluation of measurement planning).	Improvements can be made based on the result of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time			
Assignments			
Presentation			
Midterm exams	1	20	20
Project			
Clinical Practise			
Laboratory			
Field Study			
Other Applications			
Final Exam	1	20	20
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			68
Credit Workload / 30			2,26
Course ECTS Credits			2

COURSE CATEGORY

WEEKLY TOPICS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	First Day On Campus! a. verb to be, negative and interrogative forms b. greetings, names, ages c. countries and nationalities d. cardinal and ordinal numbers	
2	First Day On Campus! (Cont.) a. days, months and seasons b. this is..., that is..., these are..., those are... c. personal pronouns d. what time is it?	
3	What are you doing at the moment? a. actions in progress with positive forms	
4	What are you doing at the moment? (Cont.) a. actions in progress with negative and interrogative forms b. question words (who, what, where, when?)	
5	What do you like? a. permanent or habitual actions with positive, negative and interrogative forms	
6	What do you like? a. talking about schedules and calendars b. prepositions of time (at, in, on)	
7	General Revision and Quiz and voc. Teaching.	
8	Midterm exam	Midterm Exam
9	Can you speak...? a. abilities and inabilities b. object pronouns, possessive adjectives and possessive pronouns	
10	General Application	
11	Can you speak...? a. family members b. obligations, necessity, prohibitions and lack of necessity (must, mustn't, don't/ doesn't have to)	
12	Tests and Parties a. have got, has got with positive, negative and interrogative forms	
13	Tests and Parties a. how much...?, how many...?	
14	Tests and Parties a. a lot of, much, many	
15	A brief overview of the course content and topics	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

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Number	Program Competencies	1	2	3	4	5
1	Will be able to communicate verbally in English with reasonable fluency and accuracy in different social environments and needs...			X		
2	Uses knowledge, skills and strategies to read a variety of texts to become a successful, independent and rapid reader.	X				
3	Recognizes the spoken language used in daily life.			X		
4	Will be able to express themselves by writing different types of texts.			X		
5	They will be able to select relevant information in the texts they write and use appropriate and correct grammatical structures in accordance with both style and social discourse forms.		X			
Degree of Contribution		1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to Program Competencies.		It has a medium-level contribution to program competencies 2 and 1, and a high level contribution to competencies 3 and 4.				

COURSE CODE	COURSE NAME				Compulsory / Elective	T	P	C	ECTS
TGT1101	Radiological Examination				C	2	4	4	4
COURSE SYLLABUS									
Diploma Program Name: Medical Imaging Techniques					Course Code: TGT1101				
					Course Name: Radiological Examination				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language		Type (Compulsory/Elective)	
1	2	-	-	2	3	Turkish		Elective	
Course Admission Requirements (Prerequisites, Connection Conditions)		None							
Attendance Requirement		Theoretical			Practical		Laboratory		
		70%			%80		0%		
Instructor(s)		Doç Dr Mustafa YILDIRIM							
Teaching Methods		Lecture, Discussion, and Presentation							
Resources		Radyografik İncelemeler/TÜRK RADYOLOJİ SEMİNERLERİ/Cilt 5 • Sayı 1 • Nisan 2017 https://www.turkrad.org.tr/assets/DemektenHaberler-Pdf/STANDARTLAR2018 .							
Course Materials: Additional equipment, models, etc.		Lecture slides							
Course Objectives		Learning radiological examination techniques and imaging protocols							
Course Content		Definition and general requirements of radiological service processes, MRI and CT examination guide, areas of use of frequently encountered MRI and CT examinations and imaging standards							
Learning Outcomes		Lecture slides							
ASSESSMENT SYSTEM					Number		Contribution (%)		
Assignments									
Presentation									

Midterm Exam	1	40%
Project		
Clinical Practice		
Laboratory		
Fieldwork		
Other Practice		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Journals		
Thesis / Project		
Seminar		
Final Exam	1	60%
Other (oral etc.)		
Total	2	100%
Contribution of Midterm Studies to Final Grade		40%
Contribution of Final Exam to Final Grade		60%
What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and methods/evaluation of measurement planning)	Improvements can be made based on student course and faculty member survey evaluation results.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number Duration Credit	Number Duration Credit	Number Duration Credit
		(Hours) Workload	(Hours) Workload
Class Time	14	2	28
Outside Class Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	5	5
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1	10	10
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			
Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			85
Credit Workload / 30			2,83
ECTS Credits of the Course			3

COURSE CATEGORY

WEEKLY COURSE TOPICS

Week	Theoretical Topics	Course Application Topics
1	Radiological service processes, definition and general requirements	
2	MRI imaging guide	
3	CT imaging guide	
4	Thorax CT	
5	Thorax MRI	
6	Brain CT	

7	Brain MRI	
8	Midterm Exam	Midterm Exam
9	Pituitary MRI	
10	Spine MRI	
11	Neck MRI	
12	Paranasal sinus CT	
13	Temporal bone CT	
14	Upper abdomen CT	
15	Upper abdomen MRI	
16	Final Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS	1	2	3	4	5
1	Radiological definitions and general requirements are known				X	
2	General preparations before examination are known				X	
3	CT general techniques are known				X	
4	MRI general techniques are known				X	
5	Contrast substance applications are known			X		

Contribution Level	1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications	This course makes a moderate contribution to qualifications 2 and 5, and a high contribution to qualifications 3 and 4.				

COURSE CODE	COURSE NAME				Compulsory / Elective	T	P	C	ECTS
TGT1103	Physiology				C	2	0	2	3
COURSE SYLLABUS									
Diploma Program Name: Medical Imaging Techniques					Course Code:TGT1103				
					Course Name: Physiology				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language		Type (Compulsory/Elective)	
1	2	-	-	2	3	Turkish		Compulsory	
Course Admission Requirements (Prerequisites, Connection Conditions)		None							

Attendance Requirement	Theoretical	Attendance Requirement	Theoretical
	% 70	0	0
Instructor(s)	Dr.Öğr.Üyesi Abdullah YAŞAR		
Teaching Methods	Lecture, Discussion, Q&A, Case Study, and Presentation		
Resources	- Guyton and Hall Medical Physiology Nobel Publications 2013 Mitat Koz, Gülfem Ersöz, Ethem Gelir, Physiology Textbook, Nobel publishing house, ANKARA, 2012 -Ganong, WF (2003) Review of Medical Physiology, USA: Mc Graw Hill, Twenty-first edition. -Berne, RM, Levy, MN (2000) Principles of Physiology, Missouri: Mosby, Inc. Third ed.		
Course Materials: Additional equipment, models, etc.			
Course Objectives	In the physiology course, it is aimed to provide knowledge and skills regarding the basic functions of the body and the physiological properties of the structures and organs that form the systems.		
Course Content	Introduction to Physiology, Cell organization and transport events, Tissue physiology, Muscle physiology, Blood physiology and Homeostasis, Heart and Circulatory System and physiology, Respiratory System, Digestive System, Excretory System, Endocrine System, Metabolism.		
Learning Outcomes	To be able to define normal cell, organ and system functions, to explain the pathophysiological mechanisms that occur in cell, organ and system functions, to understand the pathophysiology of the signs and symptoms that occur in disease, to analyze the pathophysiology of the signs and symptoms that occur in disease, to diagnose the signs and symptoms that occur in disease, to evaluate the pathophysiological mechanisms related to laboratory results.		
ASSESSMENT SYSTEM		Number	Contribution (%)
Assignments			
Presentation			
Midterm Exam		1	40%
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practice			
Quizzes			
Term Paper / Project			
Portfolio Studies			
Reports			
Learning Journals			
Thesis / Project			
Seminar			
Final Exam		1	60%
Other (oral etc.)			
Total		2	100%
Contribution of Midterm Studies to Final Grade			40%
Contribution of Final Exam to Final Grade			60%
What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and methods/evaluation of measurement planning)		Improvements can be made based on student course and faculty member survey evaluation results.	
ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number Duration Credit	Number Duration Credit	Number Duration Credit
		(Hours) Workload	(Hours) Workload
Class Time	14	2	28
Outside Class Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	10	10
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1	10	10
Quizzes			
Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			

Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			118
Credit Workload / 30			3,93
ECTS Credits of the Course			4

COURSE CATEGORY

WEEKLY COURSE TOPICS

Week	Theoretical Topics	Course Application Topics
1	Introduction to Physiology	
2	Cell organization and transport events	
3	Tissue physiology	
4	Muscle physiology	
5	Blood physiology and Homeostasis,	
6	Heart and Circulatory System and physiology-1	
7	Heart and Circulatory System and physiology-2	
8	Midterm Exam (Midterm)	Midterm Exams
9	Respiratory System Physiology	
10	Digestive System Physiology	
11	Excretory System Physiology	
12	Reproductive System Physiology	
13	Endocrine System Physiology-1	
14	Endocrine System Physiology-2	
15	Organism and Metabolism	
16	General Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS					
		1	2	3	4	5
1	Understands the functions of cells, tissues and organs by defining them				X	
2	Can summarize the physiology of the systems in the human body and their structures at the cellular level			X		
3	Can summarize the body control systems and the functions of these systems in controlling the internal environment			X		
4	Using the knowledge acquired in the field, critically interprets and evaluates scientific data		X			
5	Understands the importance of lifelong learning, can identify and meet learning needs, constantly renews himself by following developments in science and technology			X		

Contribution Level	1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications	This course makes a moderate contribution to qualifications 2 and 5, and a high contribution to qualifications 3 and 4.				

COURSE CODE	COURSE NAME				Compulsory / Elective	T	P	C	ECTS
TGT1105	Anatomy				C	2	0	2	3
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging techniques					Course Code: TGT1105				
					Course Name: Anatomy				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
1	2	-	-	2	3	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Expression, slide, Q&A, mock-up							
References		Prof. Dr. Yasin Arifoğlu Books and Resources, Prof. Dr. Davut Özbağ Books and resources, Malatya Medical Faculty Anatomy Department lecture notes							
Course Materials (Auxiliary equipment, models, etc.)		Model, atlas							
Objective of the Course		To know the anatomical structures of the human body, the relationship between the systems of the human body and how they work, to examine the anatomical structures of the systems and their relationships with each other, to learn how anatomical development has developed throughout the historical process.							
Course Content		Examining the structures related to the human body, learning the systems and examining their relationships with each other. Providing information about the historical development of anatomy. Learning the terms indicating the location and direction related to the anatomical structures and the introduction title. Teaching the bone, joint and muscle tissue in the movement system, respiratory system, nervous system, circulatory system, urinary and endocrine system, learning the anatomical structures related to the digestive system and obtaining information about their working systems.							
Learning Outcomes of the Course		Expression, slide, model, atlas							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).					Improvements can be made based on the results of student course and instructor survey evaluations.				

ECTS - WORKLOAD TABLE						
COURSE EVALUATION SYSTEM	Number	Duration	Credit			
		(Hours)	Workload			
Course Duration	14	2	28			
Out-of-Class Study Time	14	2	28			
Assignments						
Presentation						
Midterm Exams	1	2	2			
Project						
Clinical Practice						
Laboratory						
Field Study						
Other Applications						
End-of-Semester Exam	1		2			
Quizzes						
Term Paper/Project						
Portfolio Studies						
Reports						
Learning Diaries						
Final Thesis/Project						
Seminar						
Other						
Credit Workload			60			
Credit Workload / 30			2			
Course ECTS Credit			2			
COURSE CATEGORY						
WEEKLY TOPIC HEADINGS						
Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course				
1	Introduction to anatomy and information about the course					
2	Movement system (upper extremity)					
3	Movement system (Lower extremity)					
4	Movement system (Columna vertebrae, sternum, costals)					
5	Movement system (os cranium and os viscero cranium) skull bones					
6	Movement system (joints)					
7	Movement system (muscles)					
8	Midterm Exam	Midterm Exam				
9	Sense organs (eye-ear)					
10	circulatory system					
11	Digestive system					
12	Nervous system					
13	respiratory system					
14	endocrine system					
15	urinary system					
16	Final Exam	Final Exam				
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies					
		1	2	3	4	5
1	Provides anatomical knowledge about the human body				X	
2	Provides information about the historical development process			X		
3	The aim is to learn words that indicate anatomical location directions..			X		

4	Understanding the anatomical formations and learning the names of the structures with the language learned				X	
5	In the final stage of the theoretical and practical stages of knowledge, learning the names of organs and structures belonging to anatomical systems and their working systems.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a moderate contribution to program competencies 2 and 5, and a high contribution to 3 and 4.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TGT1107	Medical Biology and Genetics	C	2	0	2	2

COURSE INFORMATION							
Name of the Diploma Program: Medical Imaging Technician					Course Code: TGT1107		
					Course Name: Medical Biology and Genetic		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
1	2	-	-	2	4	Turkish	Elective
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		Doç. Dr. Ş. Derya DEVECİ					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, Presentation and homework.					
References		Medical Biology,Ayşe Başaran Medical Genetik ,Nurettin Başaran.					
Course Materials (Auxiliary equipment, models, etc.)		Medical Biology and Medical genetics Lecture notes, slide Presentation, Laboratory Notes.					
Objective of the Course		To teach the student the definitions and mechanisms and to provide the student with the knowledge and skills to apply relevant diagnostic techniques in genetic diseases.					
Course Content		Cell, Organelles, DNA, RNA, Protein, Cell Cycle, Mitosis and Meiosis, Cytogenetics, Chromosomal Diseases, Gene Mutations, Single Gene Diseases, mtDNA, Immunogenetics, Genetic counseling, Prenatal diagnosis, Molecular Techniques					
Learning Outcomes of the Course		Learning Cell Biology, Gaining knowledge about basic concepts, Recognizing Genetic Diseases, Learning Genetic Diagnosis techniques					

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		

Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	14	14
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	28	28
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			112
Credit Workload / 30			3,73
Course ECTS Credit			4

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Cells	
2	Organelles	
3	DNA, organization, DNA replication	
4	RNA synthesis	
5	Protein Synthesis	
6	Cell Cycle, Mitosis and Meiosis	
7	Cytogenetics	
8	Midterm Exam	Midterm Exam
9	Chromosomal Disease	

10	gene mutations	
11	Single gene diseases and Genetic Counseling	
12	mtDNA and mtDNA Diseases	
13	Immunogenetics	
14	Prenatal Diagnosis and Methods	
15	Use of Molecular Techniques and FISH in prenatal diagnosis	
16		Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies	1	2	3	4	5
1	Learning cell biology				X	
2	Distinguish DNA, RNA, Protein and concepts			X		
3	Learning about basic concepts			X		
4	Information about Genetic Diseases				X	
5	Information about Genetic Diagnosis Techniques				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

COURSE CODE	COURSE NAME				Compulsory / Elective	T	P	C	ECTS
TGT1109	Basic Biochemistry				C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Menaging Techniques					Course Code: TGT1109				
					Course Name: Basic Biochemistry				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction		Type: (Compulsory / Elective)	
1	2	-	-	2	2	Turkish		Elective	

Course Prerequisite	Not available			
Attendance Requirement for the Course	Theoretical	Practical	Laboratory	
	70%	0	0	
Lecturer	Prof. Dr. Mehtap ÖZÇELİK			
Teaching Method of the Course	Presentation, Discussion, Question and Answer			
References	Biochemistry: (Engin M. GÖZÜKARA) - Biochemistry: (Figen GÜRDÖL, Evin ADEMOĞLU) - Principles of Biochemistry: Lehninger - Basic and Clinical Biochemistry: Bahaddin ADAM, Aysel KIYICI, Yasemin ARDIÇOĞLU			
Course Materials (Auxiliary equipment, models, etc.)				
Objective of the Course	To explain to the student the chemical aspects of events in our body at the cellular level and facilitate their learning.			
Course Content	To explain the cell, its structural components such as carbohydrates, proteins, lipids, enzymes, vitamins, minerals, nucleic acids, and their functions from a chemical perspective.			
Learning Outcomes of the Course	To understand the cell, learn the structures of carbohydrates, proteins, and amino acids, lipids, study their metabolism in our body, and learn the damage they cause in cases of deficiencies or excesses.			
COURSE ASSESSMENT SYSTEM		Number	Contribution Rate (%)	
Assignments				
Presentation				
Midterm Exams		1	40	
Project				
Clinical Practice				
Laboratory				
Field Study				
Other Applications				
Quizzes				
Term Paper / Project				
Portfolio Studies				
Reports				
Learning Diaries				
Final Thesis/Project				
Seminar				
End-of-Semester Exam		1	60	
Others (oral, etc.).				
Total:		2	100	
Contribution of In-Semester Activities to the Final Grade:			40	
Contribution of the Final Exam to the Final Grade:			60	
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).		Improvements can be made based on the results of student course and instructor survey evaluations.		
ECTS - WORKLOAD TABLE				
COURSE EVALUATION SYSTEM		Number	Duration (Hours)	Credit Workload
Course Duration		14	2	28
Out-of-Class Study Time		14	5	60
Assignments				
Presentation				
Midterm Exams		1	1	1
Project				
Clinical Practice				
Laboratory				
Field Study				
Other Applications				
End-of-Semester Exam		1	1	1
Quizzes				
Term Paper/Project				
Portfolio Studies				

Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			90
Credit Workload / 30			90/30
Course ECTS Credit			3

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Cell	
2	Introduction to Biochemistry and Biomolecules	
3	Chemical Bonds in Biological Molecules	
4	Water, Acidity, and Alkalinity Concepts	
5	Carbohydrates I: Chemistry and Structural Properties of Carbohydrates	
6	Carbohydrates II: Carbohydrate Metabolism	
7	Amino acids	
8	Midterm Exam	Midterm Exam
9	Proteins	
10	Lipids	
11	Enzymes	
12	Minerals	
13	Vitamins	
14	Hormones I	
15	Hormones II	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Presenting fundamental biochemistry concepts and ensuring their application in the clinical field.			X		
2	Acquisition of fundamental biochemical knowledge.			X		
3	Acquisition of general knowledge about the structure, function, and metabolism of biochemical molecules.				X	
4	Understanding the chemical processes occurring in our body.				X	
5	Learning about the damage caused by the deficiency and excess of biochemical molecules.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 1 and 2, and a high-level contribution to competencies 1, 3, 4, and 5.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT1111		Basic Information Technologies			C	2	2	3	3
COURSE INFORMATION									
Name of the Diploma Program: Medical Menaging Tecniques					Course Code: TGT1111				
					Course Name: Basic Information Technologies				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
1	2	2	-	3	3	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			% 80		0		
Lecturer		-----							
Teaching Method of the Course		Theoretical lectures, practical applications, laboratory, studio, extracurricular activities, software usage, etc.							
References		- Çölkesen R., Introduction to Computer Engineering. Papatya Publishing, (2007).							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		1-To provide students with the necessary knowledge infrastructure for the Introduction to Computer Science course. 2-To equip students with the technical knowledge required to generate the most suitable solution for problems related to the Introduction to Computer Science course that require resolution.							
Course Content		Understanding the basic concepts and terminology related to computers and computer science, Binary number system, hardware, examination of basic computer hardware, analysis of operating systems and utility software, network systems, the internet and internet protocols, standard internet services, FTP, Telnet, Email, HTTP, web designs, HTML programming, Microsoft Word introduction and screen elements, writing and editing text in Word documents, file and layout, view menu operations in Word, insert menu, format menu, tools menu, Microsoft Word applications, basics of computer programming.							
Learning Outcomes of the Course		Be able to express what a computer is in their own words, explain how computers process data, define computer hardware and software, describe the input and output units of a computer, explain the memory units of a computer.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	2	2
Project			
Clinical Practice			
Laboratory	14	2	28
Field Study			
Other Applications			
End-of-Semester Exam	1	4	4
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			90
Credit Workload / 30			3
Course ECTS Credit			3

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Understanding the basic concepts and terminology related to computers and computer science.	Transforming the topics taught in theoretical lessons into practice on the computer.
2	Binary number system, hardware	
3	Examination of basic computer hardware.	
4	Analysis of operating systems and utility software	
5	Network systems, the internet, and internet protocols	
6	Standard internet services, FTP, Telnet, Email, HTTP, web designs, HTML programming	
7	Introduction to Microsoft Word and screen elements	
8	Midterm (Exam)	Midterm Exam
9	Writing and editing text in Word documents	Transforming the topics taught in theoretical lessons into practice on the computer.
10	General application	
11	Word file and layout, view menu operations	
12	Insert menu, format menu, tools menu	
13	Microsoft Word applications	
14	Basics of computer programming	
15	A brief evaluation of the course content and topics	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies	1	2	3	4	5
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1	Can use professional terminology related to computer software and hardware.				X	
2	Can acquire the skills to use basic computer functions and professional programs.			X		
3	Can apply theoretical knowledge of computer hardware in practical applications.				X	
4	Can develop solutions, algorithms, and flowcharts for a given problem.			X		
5	Can use desktop publishing, drawing, and graphic design programs such as QuarkXPress, Photoshop, Illustrator, and Freehand, along with web design and 3D design.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	There is a moderate contribution to program competencies 2, 4, and 5, and a high-level contribution to competencies 1 and 3.				

COURSE CODE	COURSE NAME				Compulsory / Elective	T	P	C	ECTS
TGT1113	Biophysics				C	2	0	2	2
COURSE SYLLABUS									
Diploma Program Name: Medical Imaging Techniques						Course Code: TGT1113			
						Course Name: Biophysics			
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language	Type (Compulsory/Elective)		
1	2	-	-	2	2	Turkish	Compulsory		
Course Admission Requirements (Prerequisites, Connection Conditions)		None							
Attendance Requirement		Theoretical			Attendance Requirement		Theoretical		
		% 70			0		0		
Instructor(s)		Prof. Dr. İhsan SERHATLIOĞLU							
Teaching Methods		Lecture, Discussion, Q&A, Case Study, and Presentation							
Resources		Prof. Dr. Ferit PEHLİVAN Pelikan Publishing House/ Biophysics Book Prof. Dr. Gürbüz ÇELEBİ Barış Publishing House/Biophysics book Dr. Enes AKYÜZ Nobel Medical Publishing House/Biophysics book							
Course Materials: Additional equipment, models, etc.		Projector, Computer, PPT Program,							
Course Objectives		In the Biophysics course; it is aimed to provide knowledge and skills related to the interaction features of all kinds of information and technological developments related to medicine as an integrative discipline, how biological systems work by using the principles of physics and chemistry, mathematical analysis and computer modeling methods, how it interacts with multidisciplinary fields called clinical biophysics, medical physics, biomedical engineering, etc. by formulating problems related to living organisms with physics concepts and building bridges between disciplines with the laws of physics.							
Course Content		Introduction to Biophysics, Bioenergetics, Metabolism, Thermodynamics Cell and Cell Membrane, Particle Transitions through Cell Membranes, Ionic Balance and Nernst Equation, Action Potential, Electrical Activation in Cells, Goldman-Hodgkin-Katz Equation, Hodgkin-Huxley Action Potential Equation, Stimulus Propagation and Basic Concepts, Intercellular Signal Transmission, Ion Channels, Voltage Clamp Technique, Conduction and Contraction in Skeletal Muscle, Sliding Filaments Model, Basic Electrical Concepts, Biological Effects of Electric Current, Bioelectric Application Tools. Electromagnetic Spectrum. Electromagnetic Fields and Their Effects on							

	Biological Systems, Basic Principles of Medical Imaging Methods, Biomolecular Properties and Determination Methods Sound, Physical Properties and Formation Ultrasound, Formation, Piezoelectric Effect, Biomechanics (Bone and Implants).		
Learning Outcomes	Learning the application of physical laws and physical methods to biological systems, learning about system biophysics and molecular biophysics, learning about radiation biophysics, biological effects of radiation, properties and use of radioisotopes, learning about bioenergetics-energy flow and information theory in living things-cybernetics, Learning about cellular respiration, biophysics of respiration, circulation, vision and hearing.		
ASSESSMENT SYSTEM		Number	Contribution (%)
Assignments			
Presentation			
Midterm Exam		1	40%
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practice			
Quizzes			
Term Paper / Project			
Portfolio Studies			
Reports			
Learning Journals			
Thesis / Project			
Seminar			
Final Exam		1	60%
Other (oral etc.)			
Total		2	100%
Contribution of Midterm Studies to Final Grade			40%
Contribution of Final Exam to Final Grade			60%
What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and methods/evaluation of measurement planning)		Improvements can be made based on student course and faculty member survey evaluation results.	
ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number	Duration	Number
		Credit	Duration
		(Hours)	Credit
Class Time	14	2	28
Outside Class Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	10	10
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1	10	10
Quizzes			
Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			
Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			118
Credit Workload / 30			3,93
ECTS Credits of the Course			2
COURSE CATEGORY			
WEEKLY COURSE TOPICS			
Week	Theoretical Topics		Course Application Topics
1	Introduction to Biophysics		
2	Bioenergetics Metabolism Thermodynamics		
3	Cell and Cell Membrane Particle Transitions through Cell Membranes		

4	Ionic Balance and Nernst Equation	
5	Action Potential Electrical Activation in Cells	
6	Goldman-Hodgkin-Katz Equation Hodgkin-Huxley Action Potential Equation	
7	Stimulus Propagation and Basic Concepts Intercellular Signal Transmission	
8	Ion Channels, Voltage Clamp Technique	
9	Midterm Exam (Midterm)	Midterm Exams
10	Basic Electrical Concepts, Biological Effects of Electric Current	
11	Bioelectric Application Tools	
12	Electromagnetic Spectrum, Electromagnetic Fields and Their Effects on Biological Systems	
13	Basic Principles of Medical Imaging Methods, Biomolecular Properties and Determination Methods	
14	Sound, Physical Properties and Formation, Ultrasound, Formation, Piezoelectric Effect, Biomechanics (Bone and implants)	
15	General Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS					
		1	2	3	4	5
1	Understands the functions of cells, tissues and organs by defining them				X	
2	Can summarize the physiology of the systems in the human body and their structures at the cellular level			X		
3	Can summarize the body control systems and the functions of these systems in controlling the internal environment			X		
4	Using the knowledge acquired in the field, critically interprets and evaluates scientific data		X			
5	Understands the importance of lifelong learning, can identify and meet learning needs, constantly renews himself by following developments in science and technology			X		

Contribution Level	1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications	This course makes a moderate contribution to qualifications 2 and 5, and a high contribution to qualifications 3 and 4.				

FIELD ELECTIVE COURSE POOL-1 CONTENTS

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
SHM1101	Medical Terminology	E	2	0	2	4

COURSE INFORMATION

Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM1101		
					Course Name: Medical Terminology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
1	2	-	-	2	4	Turkish	Elective
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		-----					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		-Medical Terminology Textbook; Hatipoğlu H. G., Ekinci S.; Nobel Medical Publishing (2022) -Medical Terminology; Akbaba M., Nazlıcan E.; Akademisyen Publishing House (2018) -Lecture Notes – Slide Presentation					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To ensure the correct usage of medical terms. To provide the necessary knowledge, skills, and competencies to distinguish, correctly pronounce, write, and use medical terms related to systems and organs.					
Course Content		Introduction, Basic Terms Indicating Direction and Movement, General Information on Diseases and Classification of Diseases, Causes of Diseases, Basic Elements of Medical Terms: Roots, Prefixes, Suffixes, Suffixes Indicating Procedures, Suffixes Used to Describe Symptoms, Diagnostic Suffixes, Hospital Terminology, Abbreviations of Medical Terms, Epidemiological Terms, Terms Related to the Musculoskeletal System, Terms Related to the Respiratory System, Terms Related to the Cardiovascular System, Terms Related to the Digestive System, Terms Related to the Nervous System and Psychiatric Disorders, Terms Related to Blood and Hematopoietic Organs, Terms Related to Endocrine and Metabolic Disorders, Terms Related to the Urogenital System, Terms Related to Obstetrics and Gynecology, Terms Related to the Eye, Terms Related to the Ear, First Aid and Emergency Terminology, Pharmacological Terminology.					
Learning Outcomes of the Course		Be able to define the basic grammatical features of words in medical terminology, Learn the basic definitions and terms related to the human structure, Be able to pronounce medical terms correctly, Be able to explain and provide examples of abbreviations of medical terms, Be able to define commonly used terms related to diseases.					

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	14	14
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	28	28
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			112
Credit Workload / 30			3,73
Course ECTS Credit			4

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Introduction to medical terminology and basic concepts, types of terms	
2	General medical terms and abbreviations	
3	Regular terms, irregular terms, complex terms	
4	Parts of the human body	
5	Medical terms related to the musculoskeletal system	
6	Medical terms related to the circulatory system	
7	Medical terms related to the respiratory system	
8	Midterm Exam	Midterm Exam
9	Forensic medicine terms	
10	Medical terms related to the skin	
11	Medical terms related to the nervous system	
12	Medical terms related to the eye	
13	Medical terms related to the urogenital system	
14	Medical terms related to the endocrine system	
15	Medical terms related to the digestive system	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies	1	2	3	4	5
1	Analyzes medical terms,			X		
2	Understands and applies the rules of pronunciation and spelling of medical terms,				X	
3	Learns the roots that make up medical terms,				X	

4	Learns the prefixes that form medical terms,				X	
5	Learns the suffixes that make up medical terms.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	The program competency 1 contributes at a medium level, while competencies 2, 3, 4, and 5 contribute at a high level.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
SHM1103		Infectious Diseases			E	2	0	2	4
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM1103				
					Course Name: Infectious Diseases				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
1	2	-	-	2	4	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer		-----							
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		-Infectious Diseases. Halil Kurt, Sibel Gündeş, Mehmet Faruk Geyik (Editors); Nobel Medical Bookstores. -Infectious Diseases and Microbiology. Ayşe Willke Topçu, Güner Söyletir, Mehmet Doğanay (Editors); Nobel Medical Bookstores. -Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. John E. Bennett, Raphael Dolin, Martin J. Blaser (Editors); Elsevier Saunders.							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		The aim of the course is to learn the etiology, pathogenesis, epidemiology, clinical features, and diagnosis of infectious diseases affecting all organ systems.							
Course Content		Infection Formation, Symptoms and Signs of Infection, Infectious Diseases, Respiratory Tract Infections, Bloodborne Diseases, Fecal-Oral Transmission Diseases, Sexually Transmitted Diseases, Hospital Infections, Intensive Care Unit Infections, Disinfection and Sterilization, Personal Protective Methods, Isolation Techniques.							
Learning Outcomes of the Course		Ability to define infection, ability to distinguish common infectious diseases, ability to differentiate methods of infection prevention.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									

Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	14	14
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	28	28
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			112
Credit Workload / 30			3,73
Course ECTS Credit			4

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Introduction to Infectious Diseases: Definitions, Terminology	
2	Transmission Routes of Infectious Diseases, Pathogenesis of Infectious Diseases	
3	Prevention and Control of Community-Acquired Infectious Diseases, Risk Groups	
4	Infectious Diseases Caused by Viruses (Measles, Rubella, Mumps, Poliomyelitis)	
5	Viral Encephalitis, Common Cold, Influenza, Rabies	
6	AIDS, Hepatitis, Herpes Simplex	
7	Influenza, Crimean-Congo Hemorrhagic Fever	
8	Midterm Exam	Midterm Exam
9	Infectious Diseases Caused by Bacteria (Scarlet Fever, Whooping Cough, Diphtheria)	
10	Tetanus, Tuberculosis, Pneumococcal Pneumonia, Typhoid-Paratyphoid, Cholera, Bacillary Dysentery	
11	Gonorrhea, Syphilis, Anthrax, Brucellosis	
12	Diseases Caused by Parasites (Definition and Classification of Parasites)	
13	Parasitic Diseases Caused by Nematodes	
14	Parasitic Diseases Caused by Trematodes	

15	Parasitic Diseases Caused by Cestodes	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Defines the basic concepts of infectious diseases.				X	
2	Learns the pathways of entry for infectious agents into the human body.			X		
3	Defines the diagnostic criteria for differential diagnosis in infectious diseases.			X		
4	Explains vaccination schedules for adults and special groups.				X	
5	Gains knowledge about viral, bacterial, and parasitic diseases.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

II. SEMESTER
COMPULSORY COURSE POOL CONTENT

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TRD110	Turkish Language-II	C	2	0	2	2

Course Information								
Course Code	T	P	L	C	ECTS	Type C/E	Language TR/ENG etc.	Year/Semester
TRD110	2	0	0	2	2	C	TR	1/SPRING
Course Name (Turkish)	Türk Dili II							
Course Name (English)	Turkish Language II							

Unit/Program	Physics Department/Undergraduate Program			
Course Prerequisite	No			
Course Objectives	To comprehend the form knowledge of Turkish, to ensure that spelling-punctuation marks are used appropriately, to comprehend the elements and types of sentences, to gain the ability to write and speak without making expression disorders, to gain the ability to make presentations in front of the public, to gain the ability to examine scientific texts and take notes.			
Course Outline	Composition Information, Types of Literature, Scientific Research and Writing Methods, Spelling Rules, Punctuation Marks, Elements of the Sentence, Sentence: Analysis and Application, Studies on Expression and Sentence Disorders.			
Textbook/ Material / Resources	Turkish Language, Anadolu University Publications, No:786, Eskisehir, 2003. Turkish Language Oral and Written Expression, Uğur, A., Express Printing House, Kütahya, 2002.			
Internship Status	No			
Course Precedents				
University Name	Program Name	Course Name	T-P-L-C; ECTS	Type
The instructor who proposed the course (Title, Name and Surname)			Signature	

Instructors who can teach the course (Title, Name and Surname)	Signature

Academic justification for the opening of the course? (The effect of course outcomes on program outcomes, etc.)

Brief explanation of the course (theoretical lecture, applications, laboratory, studio, off-campus activity, using software, etc.)
It will be held in a face-to-face classroom environment.

External Stakeholder Opinions About the Course (It is expected that the opinions to be obtained from the business world that will employ your graduates or from real or legal persons outside the University who have expertise on the subject of the course will be specified. Proof documents must be attached to this form.)	
Stakeholder Name	Opinion (It should be given as a summary, it should not exceed two lines.)

Weekly Course Content Distribution		
Week	Theory	Application/Laboratory
1	Formal knowledge (Noun roots, verb roots, binary roots) Presentation, poem, essay, composition, story, newspaper, magazine studies and applications, book introductions. Bracket (parenthesis), square brackets.	
2	Shape information (suffixes in Turkish language; suffixes that make nouns from nouns, suffixes that make verbs from nouns). Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Spelling of numbers.	
3	Shape Information (Suffixes that make nouns from verbs, suffixes that make verbs from verbs). Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Caret mark.	
4	Shape information (Inflectional suffixes; conjugation suffixes from nouns, inflectional suffixes from verbs). Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Apostrophe.	
5	Groups of words. Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Spelling of words that do not fit at the end of the line.	
6	Groups of words. Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Quotation mark.	
7	Sentence (Elements of the sentence; predicate, subject, object, indirect complement, adverbial complement). Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Three dots, slashes.	
8	Sentence (Types of sentences; Simple sentence, compound sentence, sequential sentence, connected sentence).	
9	General Application	
10	Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Dash line, long line.	
11	Sentence (Sentence types, sentence analysis) Presentation, poem, essay, composition, story, newspaper, magazine studies and applications, book introductions. Spelling of foreign proper names.	
12	Expression disorders. Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Exclamation point.	
13	Expression disorders. Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Spelling of infinitive suffixes. Forms of expression. Presentations, poems,	

	essays, essays, stories, newspapers, magazine studies and applications, book introductions. Application of punctuation marks. Reviews, forms of expression. Presentations, poems, essays, essays, stories, newspapers, magazine studies and applications, book introductions. Application of punctuation marks.	
14	A brief overview of the course content and topics	
15		
16		

Assessment			
Evaluation Criteria	Activity	Custom	Contribution to Success Grade (%)
	Midterm Exams	1	20
	Quizzes		
	Assignments		
	Projects		
	Term Paper		
	Laboratory		
	Other		
	Final Exam	1	80
	Sum:		100
Remarks	The final grade of a course; It is determined using the relative evaluation system or the discretion of the instructor. In order to be evaluated in the courses where the relative evaluation system and instructor appreciation are applied, the student's final exam grade must be at least YSAS. Students who fall below this score are considered unsuccessful directly. For courses that cannot be evaluated with the relative evaluation system, the letter grades equivalent to the success grades are determined by the discretion of the instructor from the table created by the Senate over 100 points. A student who has received one of the grades AA, BA, BB, CB or CC from a course is considered successful. A student who has received one of the DC or DD grades from a course is considered to have conditionally succeeded in that course. A student who receives DD and DC letter grades must have a GPA of at least 2.00 in order to be considered successful in this course. A student who receives an FF grade from a course is considered to have failed that course		

Content Design and Subject Weight (%)	Mathematics and Basic Sciences	
	Engineering Sciences	
	Social Sciences	100
	Health Sciences	
	Educational Sciences	
	Culture and Art Sciences	

	Design Information	
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Workload (ECTS) Calculation			
Events	Number	Duration (Hours)	Total workload (Hours)
Fieldwork			
Midterm Exam Application			
Self-Study (including pre-class and exam preparation)			
Make-up Exam			
Experiment and Observation			
Class Participation (Theory)			
Homework			
Final Exam Practice			
Laboratory			
Article Review			
Writing an Article			
Reading			
Case Study			
Performance			
Problem Solution			
Project Preparation			
Project Submission			
Quiz			
Report Preparation			
Submitting Reports			
Role/Drama Work			
Seminar			
Oral Exam			
Team/Group Work			
Argument			
Application/Practice			
Other			

References	- Full Steam Ahead, 8th ed., Gündüz Education and Publishing, Ankara. Turkish-English Dictionary
Course Material (Auxiliary equipment, models etc.)	
Objective of the Course	With this course, students; in English at A2 level for undergraduate level; - Have basic grammar, - Understand the short pieces they listen to, - To be able to talk to each other using basic patterns, - Reading comprehension, - It is aimed that they can express themselves in writing.
Course Content	'There is..., there are...' constructing positive/negative and interrogative sentences with their structures, using quantifiers such as 'a lot of/ some/ a little/ a few' with countable plural and uncountable nouns; Don't use place prepositions like 'on/ under/ below', 'let's/ shall we...' making suggestion sentences with structures such as, asking and requesting help with 'can/ could you...?' structures, talking about preferences using the would like pattern; 'How often...?' Asking for frequency with a question pattern and answering using frequency adverbs such as 'never/ rarely/ usually'; constructing positive-negative-interrogative sentences in the past tense with regular and irregular verbs, asking for reasons using the question word 'why...?' and 'because...' giving reasons with the conjunction; Using the structures of adjectives and adverbs that express equality, superiority and superiority.
Learning Outcomes of the Course	-Has a basic knowledge of a foreign language sufficient for the field. -Can comprehend short, clear messages. -Can comprehend short, daily texts. -Can write short, simple notes and messages

COURSE EVALUATION SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm exams	1	40
Project		
Clinical Practise		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Other (oral etc.)		
Total:	2	100
Contribution of In Semester-Activities to the Final Grade:		40
Contribution of the Final Exam to Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g. surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting/ course content/learning needs/organization of the learning environment/sequence and correlation of topics/materials and methods/evaluation of measurement planning).	Improvements can be made based on the result of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time			
Assignments			
Presentation			
Midterm exams	1	20	20
Project			
Clinical Practise			
Laboratory			
Field Study			
Other Applications			
Final Exam	1	20	20
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			68
Credit Workload / 30			2,26
Course ECTS Credits			2

COURSE CATEGORY

WEEKLY TOPICS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Terry's Friends! a. there is..., there are... with positive, negative and interrogative forms	
2	Terry's Friends! a. a lot of, some, a few, few, any c. a lot of, some, a little, little, any	
3	Where is it? a. prepositions of place (on, in, near, next to...) b. making suggestions (let's, shall we...)	
4	Where is it? a. asking for help (can you...?, could you...?) b. preference (... would... like...?, I'd like...)	
5	How often are you late for classes? a. how often...? b. do/ does... ever...? Voc. Teaching.	
6	How often are you late for classes? a. frequency adverbs and the expression of numbers used for frequency, Possessive adj and pronouns and object pronouns	
7	General Revision and Quiz and voc. Teaching.	
8	Midterm exam	Midterm Exam
9	Past tense. definite past with regular verbs with positive, negative and interrogative forms	
10	General Application	
11	Who painted the Mona Lisa? a. definite past with irregular verbs b. why...? because...	
12	I'd like to be fitter! a. positive forms of adjectives and adverbs: as... as, not as/ so... ermine	
13	I'd like to be fitter! a. comparative and superlative forms of adjectives:... er than, the... est, more... than, ... the most, Making suggestions in English.	
14	I'd like to be fitter! a. comparative and superlative forms of adjectives: more... than, most...	
15	A brief overview of the course content and topics	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Will be able to communicate verbally in English with reasonable fluency and accuracy in different social environments and needs...			X		
2	Uses knowledge, skills and strategies to read a variety of texts to become a successful, independent and rapid reader.	X				
3	Recognizes the spoken language used in daily life.			X		
4	Will be able to express themselves by writing different types of texts.			X		
5	They will be able to select relevant information in the texts they write and use appropriate and correct grammatical structures in accordance with both style and social discourse forms.		X			

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to Program Competencies.	It has a medium-level contribution to program competencies 2 and 1, and a high level contribution to competencies 3 and 4.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT1102		X-Ray Physics			C	2	0	2	4
COURSE INFORMATION									
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1102				
					Course Name: X-Ray Physics				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
2	2	-	-	2	4	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		100%			0		0		
Lecturer		-----							
Teaching Method of the Course		Explanation, Discussion, Question-Answer, Case Study Analysis, Presentation							
References		Radiology Physics Dünya Tıp Kitabevi- ISBN: 9786059615853							
Course Materials (Auxiliary equipment, models, etc.)		Lecture Notes Slide Presentation							
Objective of the Course		To understand the basics of X-ray physics, application areas							
Course Content		What is X-ray, X-ray definition, Usage areas, Application methods							
Learning Outcomes of the Course		Have sufficient knowledge about X-ray physics.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	6	6
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	12	12
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			116
Credit Workload / 30			3,86
Course ECTS Credit			4

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	X-ray definition	
2	X-ray definition	
3	X-ray tube	
4	X-ray tube	
5	X-ray usage areas	
6	X-ray usage areas	
7	Radiation use	
8	Midterm Exam	
9	Radiation use	
10	Radiation doses	
11	Radiation doses	
12	Radiation safety	
13	Radiation safety	
14	X-ray equipment	
15	X-ray equipment	
16	Final Exam	

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Have knowledge about the definition of X-ray.				X	

2	Learns the X-ray tube.					X
3	Learns the usage areas of the X-ray device.			X		
4	Have knowledge about radiation.				X	
5	Have knowledge about radiation protection.			X		
Degree of Contribution		1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies		The program competencies 2, 4, and 5 contribute at a medium level, while competencies 1 and 3 contribute at a high level.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT1104		Pharmacology of Contrast Agents			C	1	2	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: TGT1004				
					Course Name: Pharmacology of Contrast Agents				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
2	1	-	-	1	2	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer		-----							
Teaching Method of the Course									
References		Kayaalp O. Tıbbi Farmakoloji 1-2. Cilt, 13. Baskı, Pelikan Yayıncılık, 2012. Katzung B.G. Temel ve Klinik Farmakoloji, Nobel Tıp Kitabevleri, 2021. 3Whalen K. Pharmacology 6. Baskı, Wolters Kluwer, 2015. Goodman ve Gilman'ın Farmakoloji ve Tedavi El Kitabı, 2. baskı, Güneş Tıp Kitabevleri. Gören, M. Z., Yegen, B., & Okuyan, B. Güncel Farmakoloji Fizyoloji Temelinde Hasta Odaklı Yaklaşım, Güneş Tıp Kitabevleri, 2022.							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		Gaining basic knowledge in Pharmacology. Learning about the types of contrast agents used in medical imaging. Understanding the optimal application techniques for the use of contrast agents. Gaining knowledge about the unwanted effects of contrast agents and, if any, the treatment methods. Understanding the types of allergies and their treatments.							
Course Content		Basic Pharmacology (sources of drugs, routes of administration, pharmacokinetics, pharmacodynamics, narcotics, drug interactions, toxicology, factors that alter effects). Barium contrast agents, routes of administration, indications, side effects. Iodine-based contrast agents, structure, pharmacokinetic properties, unwanted effects. Anaphylaxis and other allergic reactions.							
Learning Outcomes of the Course		Having basic knowledge about the definition, naming, and sources of drugs. Having sufficient knowledge about drug research. Understanding the pharmacokinetic and pharmacodynamic properties of drugs. Having knowledge about drug administration routes, factors that alter drug effects, bioavailability, agonism, and antagonism.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		

Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	8	28
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	1	1
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			60
Credit Workload / 30			2
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Topic Title: Introduction to Basic Pharmacology Subtopics: Introduction to Basic Pharmacology	
2	Topic Title: Drug Definition, Naming, Sources Subtopics: Drug Definition, Naming, Sources	
3	Topic Title: Drug Development Phases and Routes of Drug Administration Subtopics: Drug Development Phases and Routes of Drug Administration	
4	Topic Title: Pharmacokinetics, Pharmacodynamics, Bioavailability, Bioequivalence Subtopics: Kinetic and Dynamic Properties of Drugs, Concepts of Bioavailability and Bioequivalence	
5	Topic Title: Pharmacovigilance, Pharmacogenetics, Rational Drug Use Subtopics: Factors Altering Drug Effects, Concepts of Pharmacovigilance and Pharmacogenetics, Rational Drug Use	
6	Topic Title: Pharmaceuticals Used in Medical Imaging Subtopics: Introduction to Pharmaceuticals Used in Medical Imaging	
7	Midterm Exam	
8	Topic Title: Iodine-Based Contrast Agent Structure Subtopics: Description of the Structure of Iodine-Based Contrast Agents, Relationship Between Structure, Osmolality, Viscosity, and Efficacy-Toxicity	Midterm Exam
9	Topic Title: Iodine-Based Contrast Agent Indications and Applications Subtopics: Indications and Applications of Iodine-Based Contrast Agents	
10	Topic Title: Allergic Reactions Subtopics: Definition and Types of Allergic Reactions, Treatment of Anaphylaxis	
11	Topic Title: Barium Contrast Agents Subtopics: Structure of Barium Contrast Agents, Routes of Administration, Indications, and Complications	
12	Topic Title: Introduction to Basic Pharmacology Subtopics: Introduction to Basic Pharmacology	
13	Topic Title: Drug Definition, Naming, Sources Subtopics: Drug Definition, Naming, Sources	
14	Topic Title: Drug Development Phases and Routes of Drug Administration Subtopics: Drug Development Phases and Routes of Drug Administration	

15	Topic Title: Pharmacokinetics, Pharmacodynamics, Bioavailability, Bioequivalence Subtopics: Kinetic and Dynamic Properties of Drugs, Concepts of Bioavailability and Bioequivalence						
16	Final Exam		Final Exam				
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS							
Number	Program Competencies						
			1	2	3	4	5
1	Understanding the importance of medical imaging in healthcare.					X	
2	Gaining knowledge about the chemical structures and classification of substances used in medical imaging.				X		
3	Acquiring knowledge about the structure, pharmaceutical forms, routes of administration, and complications of preparations used for barium radiography.				X		
4	Learning the definition of iodine-based contrast agents, their chemical structures, indications for use, and their toxic and metabolic effects on various systems.					X	
5	Understanding the definition and types of allergic reactions and gaining knowledge about the treatment of anaphylaxis.					X	
Degree of Contribution		1 Very Low	2 Low	3 Medium	4 High		5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies		It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.					

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT1106		Basic Radiotherapy			C	3	0	3	4
COURSE SYLLABUS									
Diploma Program Name: Medical Imaging Techniques					Course Code: TGT1106				
					Course Name: Basic Radiotherapy				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language		Type (Compulsory/Elective)	
2	3	-	-	3	4	Turkish		Elective	
Course Admission Requirements (Prerequisites, Connection Conditions)		None							
Attendance Requirement		Theoretical			Practical		Laboratory		
		70%			0%		0%		
Instructor(s)		Dr. Uğur OFLAZ							
Teaching Methods		Lecture, Discussion, Q&A, Case Study, and Presentation							
Resources		-Becerir H.B., Alkaya F. Radyoterapi Fiziği (Nobel Akademik Yayıncılık, 2020) - Çetingöz R. Temel ve Klinik Radyoterapi (Türk Radyasyon Onkolojisi Derneği, 2013)							
Course Materials: Additional equipment, models, etc.		Examples of immobilization devices used in radiotherapy (Mask, neck collar, etc.)							
Course Objectives		The aim is to provide students with information on basic radiotherapy physics so that they can use this information appropriately in their professional lives. The aim is also to train health technicians who can internalize radiation protection and the effects of radiation in radiation treatment and ensure that the patient receives the most effective treatment.							
Course Content		Purpose of radiotherapy courses and history of radiotherapy, radiation protection in radiotherapy, definitions in daily radiotherapy practice, clinical applications in radiotherapy, radio physics and radiobiology: fixed ssd, isocentric, oblique, tangential irradiation techniques, radiotherapy treatment devices, target volume definitions in treatment, isodose curves and dose distributions, planning in radiotherapy, three-dimensional planning-intensity modulated radiotherapy, effect of radiation on tumor and basic clinical radiobiology, response of normal tissue to radiation - side effects.							
Learning Outcomes		To have the necessary and sufficient information about the types of radiation used in radiotherapy application areas and the protection methods against these types of radiation by having the basic information about the definition of radiation, types of radiation, and classification. To learn how to take tomographic images of the patient most effectively by using the necessary fixation apparatus before radiotherapy. To gain the equipment to apply the patient's treatment in the best way by having information about current treatment methods.							
ASSESSMENT SYSTEM					Number		Contribution (%)		
Assignments									
Presentation									
Midterm Exam					1		40%		
Project									
Clinical Practice									
Laboratory									
Fieldwork									
Other Practice									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Journals									
Thesis / Project									
Seminar									
Final Exam					1		60%		
Other (oral etc.)									
Total					2		100%		
Contribution of Midterm Studies to Final Grade							40%		
Contribution of Final Exam to Final Grade							60%		
What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and					Improvements can be made based on student course and faculty member survey evaluation results.				

methods/evaluation of measurement planning)	
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number Duration Credit	Number Duration Credit	Number Duration Credit
		(Hours) Workload	(Hours) Workload
Class Time	14	3	42
Outside Class Time	14	4	56
Assignments			
Presentation			
Midterm Exams	1	10	10
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1	10	10
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			
Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			118
Credit Workload / 30			3,93
ECTS Credits of the Course			4

COURSE CATEGORY	
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WEEKLY COURSE TOPICS

Week	Theoretical Topics	Course Application Topics
1	Purpose of Radiotherapy Courses and History of Radiotherapy	
2	Radiation Protection in Radiotherapy	
3	Definitions in Daily Radiotherapy Practice	
4	Clinical Applications in Radiotherapy	
5	Basic Clinical Radiobiology	
6	Early and Late Effects of Radiation	
7	Target Volume Definitions in Treatment	
8	Midterm Exam	Midterm Exam
9	Treatment Planning Techniques in Radiotherapy	
10	Patient Immobilization Devices Used in Radiotherapy	
11	Treatment Devices Used in Radiotherapy	
12	Process Steps in Radiotherapy Applications	
13	Error Definitions and Rates in Radiotherapy	
14	Radiotherapy Today and in the Future	
15	Duties and Responsibilities of Radiotherapy Technicians	
16	Final Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS	1	2	3	4	5

1	By knowing which type of radiation to interact with and in what way, they will have sufficient equipment for radiation protection.			X		
2	They can communicate healthily in the work environment by mastering the terminology related to radiotherapy.			X		
3	They learn to apply current radiotherapy techniques in the most ideal way.				X	
4	They learn the types of errors in radiotherapy and have the awareness to perform treatments with the least possible errors.					X
5	Have knowledge about the development of radiotherapy today and in the future.		X			
Contribution Level		1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications		This course makes a medium level contribution to program qualifications 1, 2 and 5, a high level contribution to 3, and a very high level contribution to 4.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS	
TGT1108		Contrast-Enhanced Radiological Imaging			C	2	4	4	6	
COURSE INFORMATION										
Name of the Diploma Program: Medical Imaging Techniques					Course Code: TLT2108					
					Course Name: Contrast-enhanced Radiological Imaging					
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)		
2	2	4	-	4	6	Turkish		Compulsory		
Course Prerequisite		Not available								
Attendance Requirement for the Course		Theoretical			Practical		Laboratory			
		70%			0		0			
Lecturer		-----								
Teaching Method of the Course		Explanation, Discussion, Question-Answer, Case Study Analysis, Presentation, and H Applications								
References		Intravascular Contrast Agents - Turkiye Klinikleri J Med Sci. 1991;11(3):220-4								
Course Materials (Auxiliary equipment, models, etc.)		Lecture Notes Slide Presentation								
Objective of the Course		Contrast Agent Application in IVP, OMD, Computed Tomography, and MRI								
Course Content		Definition of Contrast Agents, Classification, Chemical Compositions, Areas of Use, Side Effects, and Treatment"								
Learning Outcomes of the Course		Has sufficient knowledge about contrast agents								

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).

Improvements can be made based on the results of student course and instructor survey evaluations.

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	8	8
Project			
Clinical Practice			
Laboratory	14	4	56
Field Study			
Other Applications			
End-of-Semester Exam	1	14	14
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			176
Credit Workload / 30			5,86
Course ECTS Credit			6
COURSE CATEGORY			

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Contrast Agents and Their Reactions	Emergency X-Ray Imaging
2	IVP (Intravenous Pyelogram)	Emergency Computed Tomography (CT) Scans
3	Ö.M.D	MRI Scans
4	Small Intestine Imaging	Polyclinic X-ray Imaging
5	Large Intestine Imaging	Emergency Computed Tomography (CT) Scans
6	Sistografi	Polyclinic X-ray Imaging
7	Sielografi	Emergency X-Ray Imaging

8	Midterm Exam	Midterm Exam
9	Contrast-enhanced Computed Tomography (CT) Scans	Emergency Computed Tomography (CT) Scans
10	Contrast-enhanced Computed Tomography (CT) Angiography	Emergency X-Ray Imaging
11	Contrast-enhanced Computed Tomography (CT) Venography	Polyclinic X-ray Imaging
12	Contrast-enhanced MRI (Magnetic Resonance Imaging)	Emergency Computed Tomography (CT) Scans
13	Contrast-enhanced MRI Angiography (MRA)	Polyclinic X-ray Imaging
14	Contrast-enhanced MRI Venography (MRV)	Emergency X-Ray Imaging
15	MRI and CT Urography	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Has knowledge about contrast agents.				X	
2	Has sufficient knowledge about the side effects of contrast agents			X		
3	Has knowledge about fluoroscopy (skopi) imaging.				X	
4	Can perform a contrast-enhanced computed brain tomography (CT) scan			X		
5	Can perform a contrast-enhanced brain MRI.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	The program competencies 2, 4, and 5 contribute at a medium level, while competencies 1 and 3 contribute at a high level.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT1110		Microbiology			C	2	0	2	3
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques Program						Course Code: TGT1110			
						Course Name: Microbiology			
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
2	2	-	-	2	3	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Fundamentals of Microbiology and Immunology - Prof. Dr. Hakkı BİLGEHAN Microbiology Practical Book - Prof. Dr. A. Tevfik Cengiz							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		To understand the disease-causing mechanisms and general characteristics of microorganisms responsible for human diseases, gain knowledge about transmission and prevention methods, and evaluate sterilization techniques.							
Course Content		Classification and Structure of Microorganisms							
		Effects of the External Environment on Microorganisms							
		General Characteristics of Bacteria, Transmission and Prevention Methods							
		General Characteristics of Viruses, Transmission and Prevention Methods							
		Differences Between Bacteria and Viruses							
		General Characteristics of Parasites, Transmission and Prevention Methods							
		General Characteristics of Fungi, Transmission and Prevention Methods							
Learning Outcomes of the Course		Sterilization, Disinfection, and Application Methods							
		Acquiring basic knowledge about microorganisms and sterilization							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	4	56
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	1	1
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			86
Credit Workload / 30			2,86
Course ECTS Credit			3

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	General Characteristics of Microorganisms	
2	Bacterial Isolation and Identification Methods	
3	Bacterial Toxins and Pathogenicity	
4	Transmission Routes of Microorganisms	
5	Fungi	
6	Protozoa	
7	Helminths	
8	Midterm Exam	Midterm Exam
9	Arthropods	
10	Viruses	
11	Normal Flora of the Human Body	
12	Concepts Used in Sterilization and Disinfection	
13	Factors Affecting Disinfection and Sterilization	
14	Antimicrobial Chemicals	
15	Substances Affecting Proteins and Nucleic Acids, Heavy Metals	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Explains the general characteristics of microorganisms.				X	

2	Explains the transmission routes of microorganisms.			X		
3	Explains methods of protection from microorganisms.			X		
4	Gains general knowledge about sterilization and disinfection.				X	
5	Summarizes sterilization and disinfection methods.				X	
Degree of Contribution		1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies		It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1,4 and 5.				

FIELD ELECTIVE COURSE POOL-2 CONTENTS

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
SHM1102		Quality and Accreditation in Healthcare			E	2	0	2	4
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM1102				
					Course Quality and accreditation in healthcare				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
2	2		-	2	2	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Prof. Dr. Sıdıka KAYA Prof. Dr. Dilaver TENGİLİMOĞLU Asst. Prof. Dr. Oğuz IŞIK Asst. Prof. Dr. Mahmut AKBOLAT Asst. Prof. Dr. Ali YILMAZ QUALITY MANAGEMENT IN HEALTH INSTITUTIONS ESKİŞEHİR 2013							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		To have knowledge about the conditions of improving quality in healthcare and accreditation and to provide the ability to apply them, to develop presentation skills, to be able to follow scientific developments in the field, and to have research knowledge and skills in the field.							
Course Content		1. The Concept of Quality in Healthcare Services 2. Customer Satisfaction in Healthcare Institutions							
Learning Outcomes of the Course		To comprehend the importance of quality in healthcare services, to understand accreditation processes, to be able to apply quality standards in the field of medical imaging, to participate in studies aimed at increasing patient safety and satisfaction, to fulfill the requirements of quality management systems, to evaluate the impact of accreditation processes on medical imaging services, and to contribute to their professional development by adopting continuous improvement principles.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									

Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).

Improvements can be made based on the results of student course and instructor survey evaluations.

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	1	1
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			58
Credit Workload / 30			1,93
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Concepts of Quality and Service Quality	
2	The Concept of Quality in Healthcare	
3	Components of Quality in Healthcare	
4	Total Quality Management: Responsibilities of Top Management	
5	Total Quality Management: Patient Focus	
6	Total Quality Management: Employee Participation	
7	Total Quality Management: Supplier Support	
8	Midterm Exam (Midterm)	
9	Total Quality Management: Continuous Improvement	
10	Legal Regulations Applied in the Healthcare Sector	
11	International Accreditation Standards	
12	Health Quality Service Accreditation Standards 1	
13	Health Quality Service Accreditation Standards 2	
14	Joint Commission International Accreditation Standards 1	
15	Joint Commission International Accreditation Standards 2	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies	1	2	3	4	5

1	Possesses up-to-date theoretical and practical knowledge about the organization, financing, usage, and outcomes of healthcare services.		X			
2	Has the ability to understand the complex structures of healthcare organizations, conduct detailed analyses at the organizational level, and develop effective designs.			X		
3	Comprehends the interactions and dynamics of the healthcare sector at local, national, international, and global levels.			X		
4	Has the competence to evaluate and guide hospital, other healthcare organizations, and the economic and managerial operations of the healthcare system by deeply understanding these structures.		X			
5	Possesses leadership qualities in the healthcare sector, can communicate effectively with different healthcare professionals, and can adapt to teamwork.					X
Degree of Contribution		1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies		It contributes moderately to program competencies 2 and 3, and highly to 5.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
SHM1104	Sterilization	E	2	0	2	4

COURSE INFORMATION

Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM1104		
					Course Name: Sterilisation		
Semester	TheoreticalH ours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
2	2	-	-	2	4	Turkish	Elective
Course Prerequisite		Not available					
AttendanceRequirementforth e Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		Dr.Onder AYTEKIN					
TeachingMethod of theCourse		Lecture, Discussion, Q&A and Presentation.					
References		Sterilization Course Notes, Dr.Mayram HACIOĞLU					
		Sterilisation and Disinfection, Prof.Dr.Istar DOLAPCI , Ankara University- open archive					
Course Materials(Auxiliaryequipment, models, etc.)		Course notes pdf prints					
Objective of the Course		The importance of sterilization, The importance of prevention of nosocomial infections and the necessity of sterilization					
Course Content		Sterilization methods, Disinfection methods, Factors affecting sterilization, Factors affecting disinfection, Antimicrobial chemicals, Agents that cause cell membrane damage, Surface active agents, Alcohols, Phenolic compounds, Substances that affect proteins, Acid and alcalis, Substances that affect nucleic acids, Heavy metals					
Learning Outcomes of the Course		The importance of sterilization and The importance of prevention of nosocomial infections and the necessity of sterilization.					

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objectives setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

	Duration	Credit
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COURSE EVALUATION SYSTEM	Number	(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	14	14
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	28	28
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			112
Credit Workload/30			3,73
Course ECTS Credit			4

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS		
Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Sterilization methods	
2	Disinfection methods	
3	Factors affecting of sterilization	
4	Factors affecting of disinfection	
5	Antimicrobial chemicals	
6	Agents that cause cell membrane damage	
7	Surface active agents	
8	Midterm Exam	Midterm Exam
9	Alcohols	
10	Phenolic compounds	
11	Substances that affect proteins	
12	Acid and alkalis	
13	Substances that affect nucleic acids	
14	Heavy Metals	
15	Question-Answer lesson	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies					
		1	2	3	4	5
1	Understanding the difference between sterilization and disinfection					X
2	Learning about sterilizer and disinfectant substances and methods					X
3	Knowing optimal sterilization practices				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

III. SEMESTER

COMPULSORY COURSE POOL CONTENTS

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
AİT209		Atatürk’s Principles and History of Reforms-I			C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: AİT209				
					Course Name: History of Atatürk's Principles and Revolutions I				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
3	2	-	-	2	2	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer		-----							
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Higher Education Council Publications, Atatürk's Principles and Revolution History I/1 Nutuk, Söylev ve Demeçler, E. Semih Yalçın, Atatürk'ün Milli Yabancı Siyaseti, Mehmet Gönübol and Others, Olaylarla Türk Yabancı Politikası, Fahir Armaoğlu, 20th Century Political History							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		To equip students with a sense of history and citizenship and general cultural knowledge							
Course Content		The collapse of the Ottoman Empire, the War of Independence and the establishment of the Republic							
Learning Outcomes of the Course		Revolutions in the Political Field, Revolutions in the Field of Law, Revolutions in the Field of Education and Culture, Revolutions in the Economic Field, Revolutions in the Social Field, Atatürk's Principles, Atatürk's Period Turkish Foreign Policy, Turkey in the Second World War Years, Turkey between 1950-1960 years to have information about the issues.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		

Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	5	5
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	5	5
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			66
Credit Workload / 30			2,2
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Introduction; concepts and terms	
2	Reasons for the collapse of the Ottoman Empire	
3	Efforts to save and modernize the Ottoman state (reforms)	
4	Constitutional Monarchy movements and last period intellectual movements	
5	The collapse of the Ottoman Empire	
6	Committee of Union and Progress and the First World War	
7	Signing of the Armistice of Mondros and its provisions	
8	Midterm Exam (Midterm)	Midterm exam (Midterm)
9	Reactions against the Armistice, useful and harmful organizations	
10	Mustafa Kemal Pasha's landing in Samsun and developments	
11	Kuvay-ı Milliye and Misak-ı Milli	
12	Opening of the Grand National Assembly of Turkey and taking over the administration in Anatolia	
13	National fronts and political developments, Sakarya-Great Tarruz Wars, Mudanya Armistice and Lausanne Treaty	
14	A brief evaluation of the course content and topics	
15	General application	
16	General Examination	General Exam (Final)

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies										
		1	2	3	4	5					
1	Learns the transition from the Ottoman Empire to the Republic of Turkey and the recognition of the foundations of the republic			X							
2	Evaluates Atatürk's Principles in historical perspective			X							
3	Have an idea about the basic characteristics of Turkish foreign policy				X						
4	Have knowledge about the recent history of Turkey.				X						
5	Evaluates current developments by comparing them with the conditions of the past.			X							
Degree of Contribution		1 Very Low		2 Low		3 Medium		4 High		5 Very High	
Explain the Contribution of the Course Learning Outcomes to the Program Competencies		It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.									

COURSE CODE	COURSE NAME				Compulsory / Elective	T	P	C	ECTS
TGT2101	Public Health				C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Technician					Course Code: TGT2101				
					Course Name: Public Health				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction		Type: (Compulsory / Elective)	
1	2	-	-	2	4	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Public Health Basic Information. Ferdi Tanır, Hakan Demirhindi,							
		Occupational health and safety in the healthcare sector. Serap Tepe							
Course Materials (Auxiliary equipment, models, etc.)		Slide presentation, Lecture notes.							
Objective of the Course		The aim of the course is to learn the etiology, epidemiology, clinical features, and diagnosis of diseases.							

Course Content	Public Health, Physical Activity		
Learning Outcomes of the Course	Ability to define infection, ability to distinguish common infectious diseases, ability to differentiate methods of infection prevention.		
COURSE ASSESSMENT SYSTEM		Number	Contribution Rate (%)
Assignments			
Presentation			
Midterm Exams		1	40
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
Quizzes			
Term Paper / Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
End-of-Semester Exam		1	60
Others (oral, etc.).			
Total:		2	100
Contribution of In-Semester Activities to the Final Grade:			40
Contribution of the Final Exam to the Final Grade:			60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).		Improvements can be made based on the results of student course and instructor survey evaluations.	
ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	14	14
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	28	28
Quizzes			
Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			112
Credit Workload / 30			3,73
Course ECTS Credit			4
COURSE CATEGORY			
WEEKLY TOPIC HEADINGS			
Week	Theoretical Topic Headings of the Course		Practical Topic Headings of the Course
1	Public Health		

2	Physical Activity	
3	Infectious Diseases and Prevention	
4	Upper respiratory diseases	
5	Diseases Transmitted through Skin and Mucosa	
6	Oral and Dental Health	
7	Chronic Diseases	
8	Midterm Exam	Midterm Exam
9	Sanity	
10	Occupational Diseases	
11	Stress	
12	Geriarthria and Gerontology	
13	Occupational Health and Safety	
14	Multiple Intelligences	
15	Dependence	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Learning about diseases				X	
2	Distinguishing the concepts of agent, vector and symptom			X		
3	Reinforcing health concepts			X		
4	Putting what you have learned into practice				X	
5	Learning professional information				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT2103		First Aid			C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: MEDICAL IMAGING TECHNIQUES					Course Code: TGT2103				
					Course Name: FIRST AID				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
3	2	-	-	2	2	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Practice, Q&A, Case Study and Presentation							
References		Course Notes (yök course notes							
Course Materials (Auxiliary equipment, models, etc.)		Model							
Objective of the Course		Obtaining first aid information and knowing the applications theoretically							
Course Content		Knowing the precautions that the person who will apply first aid should take, Drowning and ensuring respiration, Stopping bleeding and ensuring blood circulation, Recognizing loss of consciousness and first aid, Causes of shock and first aid, degrees of coma and first aid, Performing heart massage and artificial respiration together, Degrees of burns and first aid, Recognizing fractures, dislocations and sprains and first aid, Poisoning, frostbite, heat/electric shocks and first aid, Insect bites and first aid							
Learning Outcomes of the Course		Expression, slide, model, atlas							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	2	2
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1		2
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			60
Credit Workload / 30			2
Course ECTS Credit			2

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	First aid definition, basic principles and objectives	
2	First aid for bleeding	
3	First aid for fractures, dislocations and sprains	
4	First aid for insect bites	
5	First aid for burns and heat stroke	
6	First aid in shock and electric shocks	
7	First aid in comas	
8	Midterm Exam	Midterm Exam
9	First aid in poisoning	
10	First aid for frostbite	
11	First aid for airway obstruction	
12	First aid for heart attack	
13	First aid in drowning	
14	First aid for marine animal bites	
15	First aid for poisonous animal bites	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Provides general knowledge of first aid				X	

2	Provides knowledge of the human body and anatomy			X		
3	The aim is to learn what first aid should be given in case of encountered cases.			X		
4	The applicability of the first aid practices learned is taught.				X	
5	It is aimed that the theoretical and application stages of knowledge can be done together in the final situation.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a moderate contribution to program competencies 2 and 5, and a high contribution to 3 and 4.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TGT2105	Nuclear Medicine	C	2	0	2	3

COURSE SYLLABUS							
Diploma Program Name: Medical Imaging Techniques					Course Code: TGT2105		
					Course Name: Nuclear Medicine		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language	Type (Compulsory/Elective)
3	2	-	0	2	3	Turkish	Compulsory
Course Admission Requirements (Prerequisites, Connection Conditions)		None					
Attendance Requirement		Theoretical			Practical		Laboratory
		70%			0%		0%
Instructor(s)		Prof. Dr. Tansel Ansal BALCI					
Teaching Methods		Lecture, Discussion, Q&A, Scintigraphic Images					
Resources		- Nükleer Tıp ve Moleküler Görüntüleme Cilt 1-2, Akademisyen Kitabevi - Nükleer Tıp Fiziği ve Klinik Uygulamaları, İstanbul Üniversitesi Yayınları					
Course Materials: Additional equipment, models, etc.		Slides					
Course Objectives		To train qualified technical personnel who can safely prepare and use radioactive substances for diagnosis and treatment in nuclear medicine, who can perform imaging and image processing with nuclear medicine-related devices, who know radiation safety, who can coordinate with nuclear medicine specialists and other healthcare personnel, and who can establish good relationships with patients.					
Course Content		In the field of Nuclear Medicine, using diagnostic imaging devices (Gamma camera, SPECT, PET, PET-CT, PET-MRI) and performing daily quality control tests, performing simple imaging interventions (e.g. test of the patient, etc.) under the supervision of a physician, using counting devices (gamma counter, uptake device, gamma probe, C14 breath-urea test, etc.), marking and quality control of radiopharmaceuticals for imaging and treatment purposes in the hot laboratory, and conducting quality control by the physician. Training is given to provide the necessary knowledge and skills on administering the radioactive product to the patient under supervision, performing in vitro tests using radioactive substances, assisting the physician in the application of radionuclide treatment, and working safely with open radioactive sources.					

Learning Outcomes	Ability to use diagnostic imaging devices in the field of Nuclear Medicine and perform daily quality controls, Ability to perform simple imaging interventions (exercising the patient, etc.) under the supervision of a physician, Ability to use counting devices, Marking and quality control of radiopharmaceuticals for imaging and treatment purposes in a hot laboratory and administering them to the patient under the supervision of a physician, Ability to perform in vitro tests using radioactive substances, Being able to assist the physician in radionuclide treatment application, Ability to work safely with open radioactive sources...		
	ASSESSMENT SYSTEM	Ability to perform simple imaging interventions (exercising the patient, etc.) under the supervision of a physician,	Contribution (%)
	Assignments	Ability to use counting devices,	
	Presentation	Marking and quality control of radiopharmaceuticals for imaging and treatment purposes in a hot laboratory and administering them to the patient under the supervision of a physician,	
	Midterm Exam	Ability to perform in vitro tests using radioactive substances,	40%
	Project	Being able to assist the physician in radionuclide treatment application,	
	Clinical Practice	Ability to work safely with open radioactive sources...	
Laboratory			
Fieldwork			
Other Practice			
Quizzes			
Term Paper / Project			
Portfolio Studies			
Reports			
Learning Journals			
Thesis / Project			
Seminar			
Final Exam	1	60%	
Other (oral etc.)			
Total	2	100%	
Contribution of Midterm Studies to Final Grade		40%	
Contribution of Final Exam to Final Grade		60%	
What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and methods/evaluation of measurement planning)	Improvements can be made based on student course and faculty member survey evaluation results.		
ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number Duration Credit	Number Duration Credit	Number Duration Credit
		(Hours) Workload	(Hours) Workload

Class Time			
Outside Class Time			
Assignments			
Presentation			
Midterm Exams	1		
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1		
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			
Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			
Credit Workload / 30			
ECTS Credits of the Course			

COURSE CATEGORY

WEEKLY COURSE TOPICS

Week	Theoretical Topics	Course Application Topics
1	Introduction to radiation (Basic principles, basic structure of matter and atom, definition of radioactivity, types of radiation, types of radioactive decay-fragmentation, alpha, beta and gamma decays, decay calculations, problem solving, half-life)	
2	Radiation-radioactivity units and Radiation fields	
3	Interaction of γ rays with matter - Radiation to which humans are exposed	
4	Radiation protection	
5	Biological effects of ionizing radiation	
6	Measurement-detection of radiation, radiation detectors	
7	Nuclear medicine imaging techniques, gamma cameras, SPECT (single photon computed tomography), SPECT/CT and PET/CT	
8	Midterm Exam	Midterm Exam
9	Nuclear medicine and Basic radiopharmacy: The most commonly used radionuclides, Radionuclide production, technetium generators, Tc-99m radiopharmaceuticals, PET radionuclides-radiopharmaceuticals, Therapeutic radiopharmaceuticals	
10	Properties of the ideal radiopharmaceutical used for diagnostic imaging, Preparation and quality control of radiopharmaceuticals, Localization mechanisms of radiopharmaceuticals, Principles of working with radioactive substances, principles of working in a hot laboratory, hot laboratory devices and materials, records.	
11	Clinical applications-scintigraphic examinations: Working principles of the nuclear medicine clinic, approach to the patient in nuclear medicine Circulatory system imaging (Myocardial-heart perfusion scintigraphy (MPS) Respiratory system imaging (Lung Perfusion scintigraphy, Ventilation scintigraphy)	
12	Nervous system imaging (Brain scintigraphy), Endocrine system imaging (Thyroid scintigraphy, Parathyroid scintigraphy),	
13	Gastrointestinal system imaging (Liver-spleen scintigraphy, Bile duct scintigraphy,	

	Gastroesophageal reflux scintigraphy), Urinary system imaging (kidney scintigraphies), Other methods (Bone marrow scintigraphy, lymph scintigraphy, ...)	
14	Skeletal system imaging, Oncological imaging (Tumor scanning scintigraphies, Positron emission tomography-PET/CT)	
15	Radionuclide therapy Bone densitometer-DEXA Carbon-14 (C14) breath urea test	
16	Final Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS					
		1	2	3	4	5
1	Ability to use diagnostic imaging devices in the field of Nuclear Medicine and perform daily quality controls,				X	
2	Ability to perform simple imaging interventions (exercising the patient, etc.) under the supervision of a physician,				X	
3	Ability to use counting devices,				X	
4	Marking and quality control of radiopharmaceuticals for imaging and treatment purposes in a hot laboratory and administering them to the patient under the supervision of a physician,			X		
5	Ability to perform in vitro tests using radioactive substances,			X		
6	Being able to assist the physician in radionuclide treatment application,			X		
7	Ability to work safely with open radioactive sources...				X	

Contribution Level	1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications	This course has a high level of contribution to program qualifications 3 and 4.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TGT2107	Radiation Health and Protection	C	2	0	2	3

COURSE SYLLABUS							
Diploma Program Name: Medical Imaging Techniques					Course Code: TGT2107		
					Course Name: Radiation Health and Protection		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language	Type (Compulsory/Elective)
1	2	-	-	2	3	Turkish	Elective
Course Admission Requirements (Prerequisites, Connection Conditions)		None					
Attendance Requirement		Theoretical			Practical		Laboratory
		70%			80%		0%
Instructor(s)		Doç Dr Mustafa YILDIRIM					
Teaching Methods		Lecture, Discussion, and Presentation					
Resources		Shiwangi Gupta, Radhey Shyam Sharma, Rajeev Singh Int J Environ Health Res. 2022 Apr;32(4):916-940					
Course Materials: Additional equipment, models, etc.							
Course Objectives		Information about radiation health and protection methods					
Course Content		Effects of radiation on human health and protection methods					
Learning Outcomes		Lecture slides					
ASSESSMENT SYSTEM					Number	Contribution (%)	
Assignments							
Presentation							
Midterm Exam					1	40%	
Project							
Clinical Practice							
Laboratory							
Fieldwork							
Other Practice							
Quizzes							
Term Paper / Project							
Portfolio Studies							
Reports							
Learning Journals							
Thesis / Project							
Seminar							
Final Exam					1	60%	
Other (oral etc.)							
Total					2	100%	
Contribution of Midterm Studies to Final Grade						40%	
Contribution of Final Exam to Final Grade						60%	
What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and methods/evaluation of measurement planning)					Improvements can be made based on student course and faculty member survey evaluation results.		
ECTS - WORKLOAD TABLE							
COURSE EVALUATION SYSTEM				Number Duration Credit	Number Duration Credit	Number Duration Credit	
					(Hours) Workload	(Hours) Workload	
Class Time				14	2	28	

Outside Class Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	5	5
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1	10	10
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			
Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			85
Credit Workload / 30			2,83
ECTS Credits of the Course			3

COURSE CATEGORY

WEEKLY COURSE TOPICS

Week	Theoretical Topics	Course Application Topics
1	Regarding Radiation Basic Concepts	
2	Radiation Units	
3	Radiation Sources	
4	Medical Applications	
5	Biological Effects of Radiation	
6	Classification of biological effects	
7	Radiation Fields	
8	Midterm Exam	Midterm Exam
9	Radiation Exposure Dose Limits and Reduction	
10	Pregnancy and Medical Irradiation	
11	Irradiation for Research Purposes	
12	Measurement, Marking and Instruments	
13	Personnel Measurement and Monitoring	
14	Registrations	
15	Staff Training	
16	Final Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS					
		1	2	3	4	5
1	Learns the strategy and rules for safe blood access.				X	
2	Understands how to establish well-organized and systematic national blood service units.				X	
3	Recognizes the importance of implementing quality systems in all fields.				X	
4	Learns the steps for recruiting safe blood donors, collecting and processing blood according to standardized procedures.				X	

5	Gains the necessary skills and knowledge to be an efficient and competent personnel in blood centers.			X		
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Contribution Level	1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications	This course makes a moderate contribution to qualifications 2 and 5, and a high contribution to qualifications 3 and 4.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT2109		Medical Documentation and Archival Information			C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques Program					Course Code: TGT2109				
					Course Name: Medical Documentation and Archiving Information				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
3	2	-	-	2	2	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Medical Documentation and Secretariat, Prof. Dr. Aylanur Ataklı Medical Documentation and Secretariat, Dr. Yusuf Yalçın, Lecturer Roza Süleymanoğlu Dinçer							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		To understand the types and usage areas of medical documents in healthcare institutions and to acquire general knowledge about medical document storage and archiving methods.							
Course Content		Basic Concepts Related to Archiving: Definition, Historical Development, Importance and Value, Types of Archives, Archival Classification Systems, Relationship Between Archive Documents and Files Development of Medical Documentation: Concepts and Definitions Related to Medical Documentation: Documentation, Medical Documentation, Medical Archive, Patient File, Catalog, Index Basic Standards Related to Health Records and Patient Files: Scope of Patient Files, Importance of Patient Files and Health Records, Classification Methods of Patient Files Sections of Central Medical Archives: Indexing, Filing, Missing Files, Coding, Medical Statistics and Research Units, Creation and Implementation of X-ray Film Archives							
Learning Outcomes of the Course		Recognizing medical documents, ensuring their appropriate and correct usage, and archiving them							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		

Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).

Improvements can be made based on the results of student course and instructor survey evaluations.

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	1	1
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			58
Credit Workload / 30			1,93
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Definition and History of Medical Documentation	
2	Basic Features of Medical Documents	
3	Patient Files	
4	Legal Aspects of Medical Documentation	
5	File Storage Methods and Archiving Automation	
6	International Disease Documentation System	
7	Medical Correspondence	
8	Midterm Exam	Midterm Exam
9	Medical Reports	

10	Drug Reports, Health Board Reports, Forensic Reports, Autopsy Reports	
11	Importance of Quality in Documentation	
12	Medical Secretariat Training and the Future of Documentation	
13	Security in Archiving and Automation	
14	Challenges in Archiving and Automation	
15	Legal Role of Archiving and Automation	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Explains the general characteristics of microorganisms.				X	
2	Explains the transmission routes of microorganisms.				X	
3	Explains methods of protection from microorganisms.			X		
4	Gains general knowledge about sterilization and disinfection.			X		
5	Summarizes sterilization and disinfection methods.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 3,4 and 5, and a high-level contribution to competencies 1 and 2.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TGT2111	Radiological Techniques-I	C	2	6	5	8

COURSE INFORMATION

Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2111		
					Course Name: Radiological Techniques I		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
3	2	6	-	5	8	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		-----					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					

References	1- Basic Radiology Technique (Editor: Prof. Dr. Tamer Kaya). Güneş-Nobel Publishing House, Ankara 2003 2- Internet
Course Materials (Auxiliary equipment, models, etc.)	Lecture Notes Slide Presentation
Objective of the Course	The aim is to introduce new radiological modalities and teach their usage techniques.
Course Content	CT Physics, History, and Basic Principles, CT Unit Structure, Imaging Unit, Hounsfield Scoring and Window, Resolution and Resolution CT Factors, CT Imaging Techniques Affected by Artifacts (Cervical and Thoracic, Abdomen, and Skeletal System), Device Structure and Magnetization in MRI, Imaging Parameters and Sequences, Image Characteristics, Signal-to-Noise Ratio, MRI Analysis Methods.
Learning Outcomes of the Course	Adequately apply radiological imaging techniques.

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	7	98
Assignments			
Presentation			
Midterm Exams	1	7	7
Project			
Clinical Practice	14	6	84
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	14	14
Quizzes			
Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			231
Credit Workload / 30			7,7
Course ECTS Credit			8

COURSE CATEGORY						
WEEKLY TOPIC HEADINGS						
Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course				
1	CT Physics	Emergency X-ray Imaging				
2	History and Basic Principles	Emergency Computed Tomography Imaging				
3	CT Unit Structure	MR Imaging				
4	Imaging Unit	Outpatient X-ray Imaging				
5	Hounsfield Scoring and Windowing	Computed Tomography Imaging				
6	CT Resolution and Factors Affecting Resolution	Dental X-ray Imaging				
7	Digital Radiology					
8	Midterm Exam (Quiz)	Midterm Exam (Quiz)				
9	CT Imaging Techniques					
10	Device Structure and Magnetization in MRI	Emergency X-ray Imaging				
11	Imaging Parameters and Sequences	Emergency Computed Tomography Imaging				
12	Imaging Characteristics	MR Imaging				
13	Signal-to-Noise Ratio	Outpatient X-ray Imaging				
14	MRI Analysis Methods	Computed Tomography Imaging				
15	Discussion and General Review	Dental X-ray Imaging				
16	Final Exam	Final Exam				
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies					
		1	2	3	4	5
1	They will have professional technical knowledge.				X	
2	They can perform appropriate imaging in direct radiographs.			X		
3	They can perform PA Chest and Spinal X-rays.				X	
4	They can prepare patients for tomography and provide positioning.			X		
5	They can prepare patients for MR imaging and provide positioning.			X		
Degree of Contribution						
	1 Very Low	2 Low	3 Medium	4 High	5 Very High	
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	The program competencies 2, 4, and 5 contribute at a medium level, while competencies 1 and 3 contribute at a high level.					

FIELD ELECTIVE COURSE POOL-3 CONTENTS

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
SHM2101	Environmental Protection	E	2	0	2	4

COURSE INFORMATION							
Name of the Diploma Program:Medical Imaging Techniques					Course Code: SHM2101		
					Course Name: Environmental Protection		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
1	2	-	-	2	4	Turkish	Elective
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		Prof. Dr. Mehtap ÖZÇELİK					
Teaching Method of the Course		Presentation, Discussion, Question and Answer					
References		Environmental Pollution and Control; Prof. Dr. Özer Çınar					
Course Materials (Auxiliary equipment, models, etc.)		-					
Objective of the Course		To environmental awareness ,To target what can be done to a livable environment .					
Course Content		Environment, Environmental problems, environmental pollution, the people of this pollution and the environmental impact of prevention, water pollution to the environment , human effects , ways of protection, soil pollution and kirliliğinin until etkilir and protection paths.					
Learning Outcomes of the Course		To learn the effects of air, water and soil pollution on the environment, To protect against diseases caused by this pollution and to take precautions. To have knowledge about waste; To learn about medical waste Understanding radioactive waste and protecting the environment.					
COURSE ASSESSMENT SYSTEM					Number	Contribution Rate (%)	
Assignments							
Presentation							
Midterm Exams					1	40	
Project							
Clinical Practice							
Laboratory							
Field Study							
Other Applications							
Quizzes							
Term Paper / Project							
Portfolio Studies							
Reports							
Learning Diaries							
Final Thesis/Project							
Seminar							
End-of-Semester Exam					1	60	
Others (oral, etc.).							
Total:					2	100	
Contribution of In-Semester Activities to the Final Grade:						40	
Contribution of the Final Exam to the Final Grade:						60	
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).					Improvements can be made based on the results of student course and instructor survey evaluations.		
ECTS - WORKLOAD TABLE							
COURSE EVALUATION SYSTEM				Number	Duration	Credit	
					(Hours)	Workload	
Course Duration				14	2	28	
Out-of-Class Study Time				14	6	84	
Assignments							
Presentation							
Midterm Exams				1	1	1	
Project							

Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	1	1
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			114
Credit Workload / 30			114/30
Course ECTS Credit			3.8

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	What is Environment?	
2	Effects of Environmental Pollution on Humans	
3	Ways to Protect Yourself from Environmental Pollution	
4	Water Pollution	
5	Diseases Transmitted by Polluted Water	
6	Soil Pollution	
7	Air pollution	
8	Midterm Exam	Midterm Exam
9	Airborne Diseases	
10	Radioactive Pollution	
11	Noise Pollution	
12	Waste and its types	
13	Waste Management	
14	Separation of Waste	
15	Medical waste	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	To learn the impact of Air Pollution on the environment				X	
2	To learn the impact of Soil Pollution on the environment				X	
3	To learn the impact of Water Pollution on the environment				X	

4	To learn the effects of pollution caused by radioactive substances on the environment.			X		
5	To learn about the diseases that environmental pollution will cause				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 4, and a high-level contribution to competencies 1 2, 3.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
SHM2103	Occupational Safety	E	2	0	2	4

COURSE INFORMATION

Name of the Diploma Program: Medical Imaging Techniques					Course Code: SCM2103		
					Course Occupational Health and Safety		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
2	2		-	2	2	Turkish	Elective
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer							
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		Republic of Turkey Ministry of Labor and Social Security, Occupational Health and Safety Law No. 6331					
Course Materials (Auxiliary equipment, models, etc.)		The course aims to teach topics that endanger the occupational health and safety of employees, as well as new occupational health and safety related issues.					
Objective of the Course		Definition of occupational health and safety, Occupational Health and Safety Law No. 6331, Chemical risk factors, Physical risk factors, Ergonomics, Labor law, Pressure vessels, Fire regulations, Occupational health and safety regulations and legislation, Occupational health and safety regulations and instructions, Electrical equipment, Machinery equipment, Risk analyses					
Course Content		It aims to teach the basic concepts related to occupational health and safety (OHS), risk assessment methods, protective measures, and workplace safety practices; with this course, students will understand the causes and consequences of occupational accidents and diseases, know OHS legislation, identify potential hazards and risks in the workplace, determine appropriate measures to prevent or reduce risks, understand the use and importance of personal protective equipment (PPE), apply emergency procedures, create a safe working environment, conduct risk assessments, respond to emergencies, communicate effectively, and support a culture of occupational safety.					
Learning Outcomes of the Course		Republic of Turkey Ministry of Labor and Social Security, Occupational Health and Safety Law No. 6331					

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		

Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments	1	2	2
Presentation	1	2	2
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	2	2
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			63
Credit Workload / 30			2,1
Course ECTS Credit			2
COURSE CATEGORY			

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Definition of Occupational Health and Safety	
2	Occupational Health and Safety Law No. 6331	
3	Occupational Health and Safety Law No. 6331	
4	Chemical risk factors	
5	Physical risk factors	
6	Ergonomics	
7	Labor law	
8	Midterm Exam (Midterm)	
9	Pressure vessels	
10	Fire regulations	
11	Occupational Health and Safety regulations and legislation, Occupational Health and Safety Regulations and Instructions, Electrical equipment, Machinery equipment, Risk Analyses	
12	Occupational Health and Safety Regulations and Instructions	
13	Electrical equipment	
14	Machinery equipment	

15	Risk Analyses					
16	Final Exam	Final Exam				
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies	1	2	3	4	5
1	Has the knowledge to carry out emergency response procedures.		X			
2	Has the ability to organize the process of work planning and organization.			X		
3	Can identify the hazards of chemicals and conduct relevant risk analyses.			X		
4	Is capable of establishing a recording and reporting system.		X			
5	Possesses leadership qualities in the healthcare sector, can communicate effectively with different healthcare professionals, and can adapt to teamwork.					X

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It contributes moderately to program competencies 2 and 3, and highly to 5.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
SHM2105		Health Institutions Management			E	2	0	2	4
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM2105				
					Course Name: Health Institutions Management				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
2	2	-	-	2	4	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer		-----							
Teaching Method of the Course									
References		Sağlık İşletmeleri Kavramı, Sağlık İşletmeleri Türleri Tengilimoğlu D., Işık O., Akbolat M., Sağlık İşletmeleri Yönetimi, NOBEL Yayınevi, Ankara, 2009. 2 Sağlık İşletmelerinin Özellikleri Tengilimoğlu D., Işık O., Akbolat M., Sağlık İşletmeleri Yönetimi, NOBEL Yayınevi, Ankara, 2009. 3 Sağlık işletmeleri Kuruluş Yeri Çalışmaları Tengilimoğlu D., Işık O., Akbolat M., Sağlık İşletmeleri Yönetimi, NOBEL Yayınevi, Ankara, 2009							

Course Materials (Auxiliary equipment, models, etc.)	
Objective of the Course	The aim of this course is to provide students, who will work in the healthcare sector, with information about healthcare organizations and to teach them how healthcare institutions operate.
Course Content	What is Health? Healthcare Services and Their Characteristics Classification of Healthcare Services Management and Its Characteristics Historical Development of Management Healthcare System Development of Healthcare Services in Turkey Healthcare Transformation Program Hospital Management and Classification of Hospitals Production Management in Healthcare Services Strategic Management in Healthcare Services Quality Management in Healthcare Services Information Management in Healthcare Services Ethics and Patient Rights in Healthcare Services Healthcare Institutions and Personnel Management
Learning Outcomes of the Course	Learns the characteristics, operation, and management of healthcare organizations. Recognizes the general rules of healthcare organizations and gains the ability to work interdisciplinarily. Grasps the concept of management in healthcare institutions. Knows patient rights and public relations. Understands the financial policies of healthcare institutions. Follows developments in healthcare.

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	8	112
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	1	1
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			

Credit Workload			132
Credit Workload / 30			4.2
Course ECTS Credit			4
COURSE CATEGORY			

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	What is Health, Healthcare Services and Their Characteristics	
2	Classification of Healthcare Services	
3	Management and Its Characteristics	
4	Historical Development of Management	
5	Healthcare System	
6	Development of Healthcare Services in Turkey	
7	Healthcare Transformation Program	
8	Midterm Exam	Midterm Exam
9	Hospital Management and Classification of Hospitals	
10	Production Management in Healthcare Services	
11	Strategic Management in Healthcare Services	
12	Quality Management in Healthcare Services	
13	Information Management in Healthcare Services	
14	Ethics and Patient Rights in Healthcare Services	
15	Healthcare Institutions and Personnel Management	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Has basic business knowledge in the healthcare field.				X	
2	Has the ability to apply the knowledge gained in business and management in decision-making and behaviors.			X		
3	Has the ability to understand healthcare systems and methods.			X		
4	Has knowledge of the management levels in healthcare services.				X	
5	Has the awareness of the necessity of lifelong learning; gains the ability to continuously renew oneself by following developments in science and technology.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

IV. SEMESTER

COMPULSORY COURSE POOL CONTENTS

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
AİT210		Atatürk’s Principles and History of Reforms-II			C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Documentation and Secretariat					Course Code: AİT210				
					Course Name: History of Atatürk's Principles and Revolutions II				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
4	2	-	-	2	2	Turkish		Compulsory	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer		-----							
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Council of Higher Education Publications, Atatürk's Principles and History of Turkish Revolution I/2 Speeches, Speeches and Statements, E. Semih Yalçın, Atatürk's National Foreign Policy, Mehmet Gönübol and Others, Turkish Foreign Policy with Events, Fahir Armaoğlu, 20. Century Political History							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		Students' awareness of history and citizenship, and their knowledge of general culture. Recognizing the Republican period and its values							
Course Content		Ataturk's Principles and Revolutions. Social, cultural, political and economic approaches and structuring of the Republic of Turkey							
Learning Outcomes of the Course		To be able to comprehend the importance of the Turkish Revolution, to evaluate Atatürk's principles in historical perspective, to have an idea about the basic characteristics of Turkish foreign policy, to have knowledge about the recent history of Turkey, to evaluate current developments by comparing them with the conditions of the past.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									

Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.	

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	5	5
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	5	5
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			66
Credit Workload / 30			2,2
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Revolutions in the political field, abolition of the sultanate and proclamation of the republic	
2	Renewal of elections and establishment of the People's Party	
3	Abolition of the Caliphate	
4	Reforms in the field of law (1921 Constitution, 1924 Constitution, Civil Code and Penal Code)	
5	Reforms in the field of education and culture (National Education Organization, Public Education, Foreign Schools, Alphabet Revolution, Turkish Language and History Societies)	
6	Reforms in the social field (Women's Rights, Dress Code, Closure of Dervish Lodges and Zawiyas, Changes in Calendar, Time, Measurement and Weighing Units)	
7	Regulations in the field of health and social assistance	
8	Midterm Exam (Midterm)	Midterm exam (Midterm)
9	Regulations made in the economic field (industry and trade, industrial incentive law, labor bank, agriculture and transportation activities)	
10	A brief evaluation of the course content and topics	

11	Regulations made in the economic field, (Fiscal Policy, Customs and Taxes, Law on the Protection of Turkish Currency, census and SIS, statism and planned development)	
12	Multi-party system experiments	
13	Free Republican Party	
14	Turkish Revolution and reactions to the republic, Atatürk's foreign policy	
15	General Application	
16	General Examination	General Exam (Final)

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Learns the transition from the Ottoman Empire to the Republic of Turkey and the recognition of the foundations of the republic				X	
2	Evaluates Atatürk's Principles in historical perspective			X		
3	Have an idea about the basic characteristics of Turkish foreign policy				X	
4	Have knowledge about the recent history of Turkey.			X		
5	Evaluates current developments by comparing them with the conditions of the past.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TGT2102	Radiological Techniques-II	C	4	6	7	8

COURSE INFORMATION

Name of the Diploma Program: Medical ImagingTechniques					Course Code: TGT2102		
					Course Name: Radiological Techniques II		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
4	4	6	-	7	8	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		-----					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		-1- Klinical Radiologic. Ercan Tuncel. 2- Essentials of Radiologic Science. Robert Fosbinder, Denise Orth.-Lecture Notes – Slide Presentation					

Course Materials (Auxiliary equipment, models, etc.)	Lecture Notes Slide Presentation
Objective of the Course	To teach the technician radiological methods
Course Content	Radiological Methods, Radiation Safety Committee, Basic Physics Concepts, Quality and Quality Indicators, Departments of Radiology, History and Information of Medicine, Forms, Procedures, and Interventional Radiology Technician Duties, Digital Radiology, MR Safety, CT Image Quality, Interventional Radiological Procedures.
Learning Outcomes of the Course	Adequate application of radiological imaging techniques.

COURSE ASSESSMENT SYSTEM	Number	Contribution Rate (%)
Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).	Improvements can be made based on the results of student course and instructor survey evaluations.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	4	56
Out-of-Class Study Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	5	5
Project			
Clinical Practice	14	6	84
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	12	12
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			172
Credit Workload / 30			7,56
Course ECTS Credit			8

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Radiological methods.	Emergency X-ray Imaging
2	Radiation Safety Committee	Emergency Computed Tomography Imaging
3	Basic Physics Concepts	MR Imaging
4	Quality and Quality Indicators in Radiology Departments	Outpatient X-ray Imaging
5	Patient Consent Forms	Computed Tomography Imaging
6	X-ray Imaging Positions and Applications	Dental X-ray Imaging
7	Digital Radiology	
8	Midterm Exam (Quiz)	Midterm Exam (Quiz)
9	MR Safety and Patient Preparation	
10	MR Imaging Protocols and Appropriate Coil Selection	Emergency X-ray Imaging
11	Pre-CT Imaging Patient Information	Emergency Computed Tomography Imaging
12	CT Patient Preparation and Imaging Positions	MR Imaging
13	Fluoroscopy Applications	Outpatient X-ray Imaging
14	Interventional Radiological Procedures	Computed Tomography Imaging
15	Discussion and General Review	Dental X-ray Imaging
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	They will have professional technical knowledge.				X	
2	They can perform appropriate imaging in direct radiographs.			X		
3	They can perform PA Chest and Spinal X-rays.				X	
4	They can prepare patients for tomography and provide positioning.			X		
5	They can prepare patients for MR imaging and provide positioning.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	The program competencies 2, 4, and 5 contribute at a medium level, while competencies 1 and 3 contribute at a high level.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TGT2104	Emergency X-Ray Applications	C	2	6	5	6

COURSE INFORMATION

Name of the Diploma Program: Medical Imaging Techniques					Course Code: TLT2104		
					Course Name: Emergency X-Ray Applications		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
4	2	6	-	5	6	Turkish	Compulsory
Course Prerequisite		Not available					

Attendance Requirement for the Course	Theoretical	Practical	Laboratory
	70%	0	0
Lecturer	-----		
Teaching Method of the Course	Explanation, Discussion, Question-Answer, Case Study Analysis, Presentation, and H Applications		
References	- Oyar, O. Basic Physics Concepts in Radiology. Nobel Medical Bookstores, Bursa, 1998. tton, D. Textbook of Radiology and Medical Imaging. 5th ed., Churchill Livingstone, London, 1992. Basic Radiology Technique. (Ed.: Prof. Dr. Tamer Kaya). Güneş-Nobel Bookstore, Ankara, 2003.		
Course Materials (Auxiliary equipment, models, etc.)	Lecture Notes Slide Presentation		
Objective of the Course	Examination of Emergency Pathologies in Radiology		
Course Content	Bone Injuries, Nerve Injuries, Head and Skull Injuries, Thoracic Injuries, Pneumothorax, Pneumomediastinum, Pneumopericardium, Collapse, Hemorrhage, Abdominal Trauma, Perforation, Internal Bleeding, Lacerations, Radiological Examination Methods.		
Learning Outcomes of the Course	Can perform emergency X-ray imaging. Has knowledge about emergency CT and MRI scans.		
COURSE ASSESSMENT SYSTEM		Number	Contribution Rate (%)
Assignments			
Presentation			
Midterm Exams		1	40
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
Quizzes			
Term Paper / Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
End-of-Semester Exam		1	60
Others (oral, etc.).			
Total:		2	100
Contribution of In-Semester Activities to the Final Grade:			40
Contribution of the Final Exam to the Final Grade:			60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).		Improvements can be made based on the results of student course and instructor survey evaluations.	
ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	3	42
Assignments			
Presentation			
Midterm Exams	1	6	6
Project			
Clinical Practice	14	6	84
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	12	12
Quizzes			
Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			

Seminar			
Other			
Credit Workload			172
Credit Workload / 30			5,73
Course ECTS Credit			6

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Examination of Emergency Pathologies in Radiology	Emergency X-Ray Imaging
2	Radiological Examination Methods in Head Trauma	Emergency Computed Tomography (CT) Scans
3	Radiological Examination Methods in Vertebral Trauma	Emergency MRI Scans
4	Radiological Examination Methods in Thoracic Trauma	Emergency X-Ray Imaging
5	Radiological Examination Methods in Abdominal Trauma	Emergency Computed Tomography (CT) Scans
6	Radiological Examination Methods in Gastrointestinal System Trauma	Emergency MRI Scans
7	Radiological Examination Methods in Bone Trauma	Emergency X-Ray Imaging
8	Midterm Exam	Midterm Exam
9	Radiological Examination Methods in Respiratory System Trauma	Emergency Computed Tomography (CT) Scans
10	Radiological Examination Methods in Circulatory System Trauma 1	Emergency MRI Scans
11	Radiological Examination Methods in Circulatory System Trauma 2	Emergency X-Ray Imaging
12	Radiological Examination Methods in Central Nervous System Trauma 1	Emergency Computed Tomography (CT) Scans
13	Radiological Examination Methods in Central Nervous System Trauma 2	Emergency MRI Scans
14	Radiological Examination Methods in Genitourinary System Trauma 1	Emergency X-Ray Imaging
15	Radiological Examination Methods in Genitourinary System Trauma 2	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Knows how to approach an emergency patient.				X	
2	Can perform a PA chest X-ray.			X		
3	Can perform an Abdominal X-ray				X	
4	Can perform a Computed Brain Tomography (CT) scan.			X		
5	Can perform a Diffusion-Weighted Cranial MRI.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	The program competencies 2, 4, and 5 contribute at a medium level, while competencies 1 and 3 contribute at a high level.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT2106		Interpersonal Relations			C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical İmaging Techniques					Course Code: TGT2106				
					Course Name: Interpersonal Relationships				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction		Type: (Compulsory / Elective)	
4	2	-	-	2	2	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.							
References		Communication : Psychological problems and psychotherapy / Jay Haley ; transl. Ali Uzunöz. Ankara : Çark Kitabevi Yayınları , 1988. Interpersonal Relations / Seval Erden İmamoğlu. İstanbul : Yeni İnsan Publishing House, 2009. Dökmen, Üstün (2019) Communication Conflicts and Empathy in Art and Daily Life, Ankara: Remzi Kitabevi Hortaçsu, Nuran (2012) Human Relations, Ankara: İmge Publishing House Hendrick, S.S. (2016) Psychology of Close Relationships Translated with DeepL.com (free version)							
Course Materials (Auxiliary equipment, models, etc.)		----							
Objective of the Course		To enable them to comprehend the basic concepts and importance of communication, to develop their application skills and to use them in their social and professional lives.							
Course Content		The content of the course consists of topics such as defining communication, defining the concepts related to the interpersonal communication process, explaining the types of conflicts encountered in the interpersonal communication process, important concepts in interpersonal relations, psychology of persuasion, the characteristics of interpersonal relationships developed in various periods of life.							
Learning Outcomes of the Course		Knows the basic concepts of communication and interpersonal relationships Knows the types of verbal and non-verbal communication, empathy and effective listening Knows the effective factors in the development of interpersonal relationships Understands the quality of relationships established in various periods of life Knows the psychological processes effective in persuading others							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).					Improvements can be made based on the results of student course and instructor survey evaluations.				
ECTS - WORKLOAD TABLE									

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	5	5
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	5	5
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			66
Credit Workload / 30			2,2
Course ECTS Credit			2

COURSE CATEGORY	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	The Necessity of Communication in Human Relations	
2	Interpersonal Communication and Developmental Approach	
3	Interpersonal Communication Skills	
4	Social Cognition and Memory	
5	Interdependence in Human Relationships	
6	The Social Context of Interpersonal Communication	
7	Social Behavior and Social Influence	
8	Midterm Exam	Midterm Exam
9	Human Relationship Models in the Context of Social Psychology and Developmental Psychology	
10	Interpersonal Communication in Childhood	
11	Interpersonal Communication in Adolescence	
12	Interpersonal Communication in Adulthood	
13	Interpersonal Communication in Old Age	
14	Group Communication Processes	
15	General Review	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	They have an approach to understanding human beings with their psychological and social aspects.				X	
2	They have the ability to express critical thinking in a constructive way.			X		

3	Understand the basic issues about interpersonal relationships and communication			X		
4	Explain issues related to interpersonal relationships to various audience groups				X	
5	To be able to express his/her thoughts on problems and solutions both orally and in writing.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

COURSE CODE	COURSE NAME	Compulsory / Elective	T	P	C	ECTS
TDS2108	Medical Ethics and Deontology	C	2	0	2	2

COURSE INFORMATION							
Name of the Diploma Program: Medical Documentation and Secretariat					Course Code: TDS2108		
					Course Name: Medical Ethics and Deontology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
4	2	-	-	2	2	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		-----					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		- Medical Ethics and Deontology; Erdemir A.; Nobel Medical Publishing (2011) - World Medical Association - Medical Ethics Handbook (Translation); Civaner M.; (Turkish Medical Association- 2015) - Lecture Notes – Slide Presentation					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		The aim is to provide theoretical knowledge on concepts related to medical ethics and patient rights, enhance knowledge of medical ethics, and ensure the ability to apply ethical principles in all professional practices throughout a healthcare career. Students will be taught about the relationships between healthcare workers, patients, and society, ethical principles that must be followed in all medical practices, potential ethical issues, and solutions. The course will cover topics such as fundamental concepts of deontology and ethics, ethical principles, patient/elderly rights, and key medical ethics problems.					
Course Content		Deontology and Its Methodology, Doctor-Patient (Technician) Relationships, Human Rights, Autonomy and Informed Consent, Organ Transplantation, Ethical Principles, History of Medicine, Medical Ethics and Bioethics, Communication, Genetics and Ethics, Research Ethics, Alternative Medicine, Patient Rights, Deontology Methodology.					
Learning Outcomes of the Course		Gaining theoretical knowledge about concepts related to medical ethics and patient rights, Learning about the relationships between healthcare workers, patients, and society, as well as the ethical principles that should be followed in all medical practices, potential ethical issues, and their solutions, Learning fundamental concepts of deontology and ethics, ethical principles, patient/elderly rights, and key medical ethics problems.					
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)

Assignments		
Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).

Improvements can be made based on the results of student course and instructor survey evaluations.

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	2	2
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	2	2
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			60
Credit Workload / 30			2
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	What is a profession? What are the principles of a profession?	
2	The history of medical ethics in the world and in our country	
3	The concept of ethics and related concepts	
4	Principles of medical ethics	
5	Human rights in medical ethics	
6	Duties, responsibilities, and medical liability of healthcare personnel	
7	Healthcare personnel-patient relationships and ethical issues	
8	Midterm Exam	Midterm Exam

9	Informed consent, privacy, confidentiality of information	
10	Genetic Research and Its Ethical Dimension	
11	Laboratory Animals and Ethics	
12	Organ transplantation, euthanasia, infectious diseases, and ethics	
13	Scientific Research and Publication Ethics	
14	Current issues in medical ethics	
15	Case studies	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Using advanced knowledge and skills acquired in the healthcare field, interprets and evaluates scientifically proven data, defines problems, analyzes them, develops solution proposals based on research and evidence while considering professional and ethical values, shares knowledge, and collaborates in team work.				X	
2	Evaluates the advanced knowledge and skills acquired in the healthcare field with a critical approach.			X		
3	Informs relevant individuals and institutions on healthcare-related issues; communicates thoughts and solutions to problems both in writing and orally; listens to the thoughts, needs, and expectations of relevant individuals and institutions.				X	
4	Collects, interprets, and applies healthcare-related data, collaborates with people from relevant disciplines in the dissemination of results, and acts in accordance with social, scientific, cultural, and ethical values.				X	
5	Acts in accordance with quality management and processes and participates in these processes.			X		
6	Acts in compliance with laws, regulations, legislation, and professional ethics rules regarding duties, rights, and responsibilities as an individual.				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	The program competencies 2 and 5 contribute at a medium level, while competencies 1, 3, 4, and 6 contribute at a high level.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
TGT2110		Disease Knowledge			C	2	0	2	2
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: TGT2110				
					Course Name: Disease Knowledge				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
4	2	-	-	2	2	Turkish		Compulsory	
Course Prerequisite		Not available							
		Theoretical			Practical		Laboratory		

Attendance Requirement for the Course	70%	0	0
Lecturer	-----		
Teaching Method of the Course	Lecture, Discussion, Q&A, Case Study, and Presentation.		
References	- Gülay M.Ş., Polat M. Disease Knowledge Textbook, Dünya Medical Publishing (2021) - Yürügen B., Nural N., Disease Knowledge, Nobel Medical Publishing (2020) - Slide Presentation on Topics		
Course Materials (Auxiliary equipment, models, etc.)			
Objective of the Course	To provide information on the mechanisms of disease development, diagnosis, treatment, and methods of disease prevention.		
Course Content	General Structure of the Human Body, Cells-Tissues-Organs-Systems, Anatomy of Systems, Physiology of Systems, Pathophysiology of Systems, Diseases of the Digestive System, Diseases of the Circulatory System, Blood, Blood Groups, and Blood Disorders, Diseases of the Endocrine System, Diseases of the Excretory System, Diseases of the Respiratory System, Diseases of the Nervous System, Fluid, Electrolyte, Acid-Base Balance, Diseases of Joints and Connective Tissue, Diseases of the Immune System, Ear-Nose-Throat Diseases, Eye Diseases, Skin Diseases.		
Learning Outcomes of the Course	Ability to understand the mechanisms of disease development, diagnosis, treatment, and methods of disease prevention.		
COURSE ASSESSMENT SYSTEM		Number	Contribution Rate (%)
Assignments			
Presentation			
Midterm Exams		1	40
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
Quizzes			
Term Paper / Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
End-of-Semester Exam		1	60
Others (oral, etc.).			
Total:		2	100
Contribution of In-Semester Activities to the Final Grade:			40
Contribution of the Final Exam to the Final Grade:			60
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).		Improvements can be made based on the results of student course and instructor survey evaluations.	
ECTS - WORKLOAD TABLE			
COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	2	28
Assignments			
Presentation			
Midterm Exams	1	2	2
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	2	2
Quizzes			
Term Paper/Project			
Portfolio Studies			

Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			60
Credit Workload / 30			2
Course ECTS Credit			2

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	General Structure of the Human Body	
2	Health and Disease	
3	History Taking and Physical Examination in Disease Diagnosis	
4	Diseases of the Digestive System	
5	Diseases of the Circulatory System	
6	Blood Disorders	
7	Blood Disorders	
8	Midterm Exam	Midterm Exam
9	Diseases of the Endocrine System	
10	Urinary System and Diseases	
11	Diseases of the Respiratory System	
12	Diseases of the Nervous System	
13	Diseases of the Immune System	
14	Occupational Diseases	
15	Cancers	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Has basic theoretical and practical knowledge related to the field.			X		
2	Possesses knowledge of ethical principles and rules related to the field.		X			
3	Uses the foundational knowledge in the field to independently perform a given task.				X	
4	Recognizes the importance of classifying diseases in professional practice.				X	
5	Can distinguish between health and disease, evaluate the patient, and follow the process.				X	
6	Interprets the causes of diseases.				X	
7	Distinguishes the basic diagnostic methods, signs and symptoms, and main treatment approaches of diseases.			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
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Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 1 and 7, and a high-level contribution to competencies 3, 4, 5, and 6.
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FIELD ELECTIVE COURSE POOL-4 CONTENTS

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
SHM2104		Crisis Management and Anger Control			E	2	0	2	4
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM2104				
					Course Name: Crisis Management and Anger Control				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction		Type: (Compulsory / Elective)	
1	2	-	-	2	4	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer									
Teaching Method of the Course		Lecture, Discussion, Question-Answer							
References		1. Özer, Kadir. Duygusal gerilimle baş edebilme, Varlık yayınları, İstanbul, 1989. 2. Tekin, Mahmut ve Zerenler, Muammer. Krizi yönetebilmenin sırları, Çizgi kitabevi, 2005. 3. Soykan, Çiğdem. Öfke ve öfke yönetimi, Kriz dergisi, sayı:11, Ankara. 4. Dregrov, Atle. Çocuk, kayıplar ve yas, Türk Psikologlar Derneği Yayınları, Ankara, 2000. 5. Cüceloğlu Doğan. İçimizdeki Biz “kalite bilincinin temeli”, Geliştiren kitaplar dizisi, İstanbul.1996. 6. Pennebaker, J.W. İçinizi dökün “duyguları dışa vurmanın iyileştirici gücü”, Hekimler yayın birliği, Ankara, 2009.							
Course Materials (Auxiliary equipment, models, etc.)									
Objective of the Course		The aim of this course is to provide to students with anger management skills by managing crisis situations that may arise in the field of law and by better evaluating the disputes that arise as a result of the crisis.							
Course Content		1. Definition of crisis, types, crisis in human relations, types of crisis, possible crises in the field of law 2. Causes of crisis 3. Characteristics and stages of crisis 4. Possible crisis situations and management in legal practices 5. Possible consequences of crisis 6. Empathy in human relations 7. Results of poorly managed crises 8. Examination of examples of crises experienced in courts 9. Crisis management in legal services of a judicial nature 10. What is anger, causes of anger and anger management 11. Results of poorly managed anger 12. The relationship between anger and crime 13. Examples of poorly managed crises							
Learning Outcomes of the Course		At the end of this course, students will be able to; 1. Define what a crisis is in human relations and its stages. 2. Define the factors that lead to a crisis and what crisis management is. 3. Apply anger management and how to control anger and ways to cope with emotional tension. 4. Relate the process of emotion to anatomical structures. 5. Define how to understand the situations of people in crisis and anger through empathy.							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									

Presentation		
Midterm Exams	1	40
Project		
Clinical Practice		
Laboratory		
Field Study		
Other Applications		
Quizzes		
Term Paper / Project		
Portfolio Studies		
Reports		
Learning Diaries		
Final Thesis/Project		
Seminar		
End-of-Semester Exam	1	60
Others (oral, etc.).		
Total:	2	100
Contribution of In-Semester Activities to the Final Grade:		40
Contribution of the Final Exam to the Final Grade:		60

What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objective setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).

Improvements and updates of the course can be made based on feedbacks received from students through questionnaires and interviews.

ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number	Duration (Hours)	Credit Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	10	10
Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	10	10
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			118
Credit Workload / 30			118/30=3,95
Course ECTS Credit			4

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Definition of crisis, types, crisis in institutions and human relations, types of crisis, possible crises in the field of law	
2	Reasons that create crisis	
3	Characteristics and stages of crisis	
4	Possible crisis situations and management in legal practices	
5	Possible results of crisis	
6	Empathy in human relations	

7	Consequences of poorly managed crisis	
8	Midterm Exam	Midterm Exam
9	Examination of examples of crisis experienced in courts	
10	Examples of crisis seen in organizations	
11	Crisis management in legal services of a judicial nature	
12	What is anger, causes of anger and anger management	
13	Consequences of poorly managed anger	
14	Relationship between anger and crime	
15	Examples of poorly managed crisis	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Having the ability to access and evaluate information sources					X
2	Having the ability to use, compare, interpret, draw conclusions and apply scientific data				X	
3	Having the historical knowledge to interpret modern legal achievements				X	
4	Having the ability to use Turkish effectively in oral and written form				X	
5	Having the ability to follow professional literature in at least one foreign language			X		
6	Having the ability to use professional information technologies effectively in solving legal problems			X		
7	Having the ability to apply the knowledge acquired in solving a concrete event				X	
8	Having the basic knowledge to evaluate the common problems of the international community and their possible solutions			X		
9	Having the level of understanding and knowledge that will best reflect all the characteristics required by the profession at national and international levels		X			
10	Having acquired the awareness of professional and ethical responsibility				X	
11	Having the ability to express oneself individually and in front of the community				X	
12	Having the ability to follow the regulations and legal searches aimed at meeting the new needs that arise within the framework of the relationships between individuals			X		

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	Of the program competencies, 1 has a very high level contribution, 2-4, 7, 10 and 11 have a high level contribution, 5, 6, 8, 12 have a medium level contribution and 9 has a low level contribution.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
SHM2106		Rational Drug Use			E	2	0	2	4
COURSE INFORMATION									
Name of the Diploma Program: Medical Imaging Techniques					Course Code: SHM2106				
					Course Name: Rational Drug Use				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction		Type: (Compulsory / Elective)	
2	2	-	-	2	4	Turkish		Elective	
Course Prerequisite		Not available							
Attendance Requirement for the Course		Theoretical			Practical		Laboratory		
		70%			0		0		
Lecturer		Dr.Onder AYTEKIN							
Teaching Method of the Course		Lecture, Discussion, Q&A and Presentation.							
References		Rational Use of Medicine. Republic of Turkey Ministry of Health, Medical Drugs and Medical Devices Agency Publications							
Course Materials (Auxiliary equipment, models, etc.)		Course notes pdf prints							
Objective of the Course		Teaching that the right medicine should be applied at the right time, in the right amount, and in the right way							
Course Content		Definition of medicine, basic information about rational drug use, rational drug use in the world and in Turkey, rational drug use in various diseases.							
Learning Outcomes of the Course		Will be able to define and use rational drug use, will have information about drug use and information							
COURSE ASSESSMENT SYSTEM					Number		Contribution Rate (%)		
Assignments									
Presentation									
Midterm Exams					1		40		
Project									
Clinical Practice									
Laboratory									
Field Study									
Other Applications									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Diaries									
Final Thesis/Project									
Seminar									
End-of-Semester Exam					1		60		
Others (oral, etc.).									
Total:					2		100		
Contribution of In-Semester Activities to the Final Grade:							40		
Contribution of the Final Exam to the Final Grade:							60		
What are the proposed assessment and evaluation tools in the context of the continuous improvement of courses (e.g., surveys, interviews, etc.) and for what purpose are they applied? Please define the purpose (goal and objectives setting / course content / learning needs / organization of the learning environment / sequence and correlation of topics / materials and methods / evaluation of assessment planning).					Improvements can be made based on the results of student course and instructor survey evaluations.				
ECTS - WORKLOAD TABLE									
COURSE EVALUATION SYSTEM				Number		Duration (Hours)		Credit Workload	
Course Duration				14		2		28	
Out-of-Class Study Time				14		3		42	
Assignments									
Presentation									
Midterm Exams				1		14		14	

Project			
Clinical Practice			
Laboratory			
Field Study			
Other Applications			
End-of-Semester Exam	1	28	28
Quizzes			

Term Paper/Project			
Portfolio Studies			
Reports			
Learning Diaries			
Final Thesis/Project			
Seminar			
Other			
Credit Workload			112
Credit Workload/30			3,73
Course ECTS Credit			4

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Definition of rational drug use	
2	Roles of health professionals in rational drug use	
3	Definition and applications of pharmacovigilance	
4	Prescription and electronic prescription	
5	Rational drug use in pregnant and breastfeeding women	
6	Rational drug use in children	
7	Rational drug use in the elderly	
8	Midterm Exam	Midterm Exam
9	Rational use of drugs in patients with chronic diseases	
10	Rational use of vitamins, minerals and nutritional supplements	
11	Rational use of antibiotics I	
12	Rational use of antibiotics II	
13	Medication errors and administration errors I	
14	Medication errors and administration errors	
15	Medication side effects and complications	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Understanding the difference between medicine and non-medicine products					X
2	Being aware of correct medicine use					X
3	Being informed about medicine effects				X	

Degree of Contribution	1 Very Low	2 Low	3 Medium	4 High	5 Very High
Explain the Contribution of the Course Learning Outcomes to the Program Competencies	It has a medium-level contribution to program competencies 2 and 3, and a high-level contribution to competencies 1, 4, and 5.				

COURSE CODE		COURSE NAME			Compulsory / Elective	T	P	C	ECTS
SHM2108		Blood Banking and Transfusion			E	2	0	2	4
COURSE SYLLABUS									
Diploma Program Name: Medical Imaging Techniques					Course Code: SHM2108				
					Course Name: Blood banking and transfusion				
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language		Type (Compulsory/Elective)	
4	2	-	-	2	4	Turkish		Elective	
Course Admission Requirements (Prerequisites, Connection Conditions)		None							
Attendance Requirement		Theoretical			Practical		Laboratory		
		70%			0%		0%		
Instructor(s)		Dr. Abdullah YAŞAR							
Teaching Methods		Lecture, Discussion, Q&A, Case Study, and Presentation							
Resources		National Blood and Blood Products Guide, Ankara 2011 Physiology Textbook, Guyton & Hall, 2021							
Course Materials: Additional equipment, models, etc.									
Course Objectives		To establish well-organized, continuous, and systematic national blood service units ensuring cooperation and communication, implementing quality systems across all fields, securing safe blood donors, and ensuring collected blood is processed, tested, and utilized according to standardized procedures through safe and efficient methods.							
Course Content		National legislation and regulations on blood and blood products, Definitions related to blood service units, Physical structures and sections of blood centers, Definitions and uses of equipment, devices, tools, and instruments, Definition of personnel, duties, authority, and responsibilities, Quality management system and processes, Equipment control, data processing system, record-keeping, Donor selection, screening, and anamnesis, Apheresis donation, blood collection procedures, donor reactions, Definition of blood and its components, transfusion to various patient profiles, potential side effects, Autologous transfusion, use in prenatal, neonatal, and infant patients, Technical procedures applied to collected products, immunohematological tests, Transfusion applications and hemovigilance definitions and practices							
Learning Outcomes		Lecture slides Course textbook and summary notes Internet, media, and visual materials Midterm and final exams							
ASSESSMENT SYSTEM					Number		Contribution (%)		
Assignments									
Presentation									
Midterm Exam					1		40%		
Project									
Clinical Practice									
Laboratory									
Fieldwork									
Other Practice									
Quizzes									
Term Paper / Project									
Portfolio Studies									
Reports									
Learning Journals									
Thesis / Project									
Seminar									
Final Exam					1		60%		
Other (oral etc.)									
Total					2		100%		
Contribution of Midterm Studies to Final Grade							40%		
Contribution of Final Exam to Final Grade							60%		

What are the measurement and evaluation tools envisaged in the context of continuous improvement of courses (survey, interview, etc.) and for what purpose are they applied? Please describe (goal and purpose determination/course content/learning needs/organization of the learning environment/sequence and correlation of topics/material and methods/evaluation of measurement planning)	Improvements can be made based on student course and faculty member survey evaluation results.
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ECTS - WORKLOAD TABLE

COURSE EVALUATION SYSTEM	Number Duration Credit	Number Duration Credit	Number Duration Credit
		(Hours) Workload	(Hours) Workload
Class Time	14	2	28
Outside Class Time	14	5	70
Assignments			
Presentation			
Midterm Exams	1	10	10
Project			
Clinical Practice			
Laboratory			
Fieldwork			
Other Practices			
Final Exam	1	10	10
Quizzes			
Term Paper/Project			
Portfolio Studies			
Reports			
Learning Journals			
Graduation Thesis/Project			
Seminar			
Other			
Credit Workload			118
Credit Workload / 30			3,93
ECTS Credits of the Course			4

COURSE CATEGORY

WEEKLY COURSE TOPICS

Week	Theoretical Topics	Course Application Topics
1	National legislation and guidelines on blood and blood products	
2	Definitions of blood service units	
3	Physical structures and sections of blood centers	
4	Equipment, tools, and their usage in blood centers	
5	Definition, roles, and responsibilities of personnel	
6	Inspection and quality assurance in blood centers	
7	Definition, importance, and necessity of data processing and record-keeping systems	
8	Midterm Exam	Midterm Exam
9	Donor selection and anamnesis	
10	Types of blood donations	
11	Donor reactions	
12	Blood components and their types	
13	Technical procedures applied to blood products	
14	Application of immunohematological tests	
15	Transfusion applications	
16	Final Exam	Final Exam

COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS RELATIONSHIP

No	PROGRAM QUALIFICATIONS	1	2	3	4	5

1	Learns the strategy and rules for safe blood access.		X			
2	Understands how to establish well-organized and systematic national blood service units.			X		
3	Recognizes the importance of implementing quality systems in all fields.				X	
4	Learns the steps for recruiting safe blood donors, collecting and processing blood according to standardized procedures.				X	
5	Gains the necessary skills and knowledge to be an efficient and competent personnel in blood centers.			X		

Contribution Level	1: Very Low	2: Low	3: Medium	4: High	5: Very High
Explanation of Course Learning Outcomes Contribution to Program Qualifications	This course makes a moderate contribution to qualifications 2 and 5, and a high contribution to qualifications 3 and 4.				

