

This is the curriculum to be implemented starting from the 2025-2026 academic year for the Medical Laboratory 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
TLT101	TLT1101	Histology	C	1	2	2	2	TLT102	TLT1102	Laboratory Equipment Usage and Maintenance	C	1	2	2	2
SHM103	TLT1103	Physiology	C	2	0	2	3	TLT104	TLT1104	Laboratory Methods and Safety	C	2	2	3	3
SHM101	TLT1105	Anatomy	C	2	0	2	3	TLT106	TLT1106	Parasitology	C	2	2	3	3
SHM107	TLT1107	Medical Biology and Genetics	C	2	2	3	3	TLT108	TLT1108	Hematology	C	1	2	2	2
TLT105	TLT1109	Basic Biochemistry	C	2	0	2	2	TLT110	TLT1110	Immunology	C	2	0	2	2
ENF101	TLT1111	Basic Information Technologies	C	2	2	3	3	SHM132	TLT1112	Basic Biochemistry	C	3	0	3	3
TLT103	TLT1113	Basic Microbiology and Virology	C	2	2	3	3	TLT114	TLT1114	Clinical Microbiology	C	2	2	3	4
		Field Elective Course-I	E	2	0	2	4			Field Elective Course-II	E	2	0	2	4
	SSD1101	Social Elective Course-I	E	2	0	2	3		SSD1102	Social Elective Course-II	E	2	0	2	3
		Term Total		21	8	25	30			Term Total		21	10	26	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	TLT2101	Public Health	C	2	0	2	2	TLT202	TLT2102	Laboratory Applications-II	C	2	6	5	7
TLT213	TLT2103	Clinical Biochemistry	C	2	2	3	5	TLT204	TLT2104	Emergency Laboratory Applications	C	2	4	4	5
SHM235	TLT2105	Medical Documentation	C	2	0	2	2	SHM226	TLT2106	Interpersonal Relations	C	2	0	2	2
SHM237	TLT2107	Pathology	C	2	2	3	4	SHM222	TLT2108	Medical Ethics and Deontology	C	2	0	2	2
TLT211	TLT2109	Laboratory Applications-I	C	2	6	5	7	SHM220	TLT2110	Disease Knowledge	C	2	0	2	2
		Field Elective Course-III	E	2	0	2	4	SHM224	TLT2112	First Aid	C	2	0	2	2
		Field Elective Course-III	E	2	0	2	4			Field Elective Course -IV	E	2	0	2	4
										Field Elective Course -IV	E	2	0	2	4
		Term Total		16	10	21	30			Term Total		18	10	23	30

FIELD ELECTIVE COURSE LİST															
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	38
Total Credit	95
Total Course Hours	114
Total ECTS Credits	120
Practical Ratio	33,33

I. SEMESTER
COMPULSORY COURSE SYLLABUSES

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TRD109		
					Course Name: Turkish Language-I		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
1	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		Turkish Language, Anadolu University Publications, No: 786, Eskişehir, 2003.					
		Turkish Language: Oral and Written Expression, Uğur, A., Ekspres Printing House, Kütahya, 2002.					
		Oral and Written Expression, Anadolu University Publications, No: 1073, Eskişehir, 1998.					
		Applied Turkish Knowledge, Göker, O., Evos Publishing, Ankara, 2001.					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To help students understand the characteristics of language and its role in social life; to teach the historical periods of the Turkish language; to help students comprehend the phonetic and morphological structure of Turkish and use punctuation marks correctly; to teach words in terms of meaning and function; and to develop public speaking skills.					
Course Content		Concept of language, the role and importance of language in social life, the relationship between language and culture, the relationship between culture and civilization, the place of Turkish among world languages and its historical development, art-creativity and society, Turkish grammar (phonetic features, phonology, syllable structure, spelling rules and application, punctuation marks and application)					
Learning Outcomes of the Course		Recognizes different text types and their characteristics. Learns composition knowledge theoretically and practically. Understands different written expression types. Gains the ability to create texts suitable for different types and analyze existing texts. Understands expression styles and their appropriateness in written expression.					
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	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	
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WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Definition and characteristics of language, its role and importance in social life Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Punctuation usage: Period.	
2	Relationship between language and thought, language and nation, language and culture; definition of culture Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Punctuation usage: Comma.	
3	Languages of the world, classification of world languages, language differentiation; written and spoken languages (dialects, accents, vernaculars) Petition writing. Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications.	
4	The place of Turkish among world languages, history of Turkish language	
5	Resume writing Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Punctuation usage: Capital letters.	
6	Development of Turkish language: Altaic period, Ancient Turkish, Old Turkish, Orkhon Inscriptions Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Finding Turkish equivalents for foreign words.	
7	Development of Turkish language: New Turkish, Modern Turkish. Dialects, accents, vernaculars. Current state and expansion of Turkish, alphabets used by Turks, linguistics Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications.	
8	Midterm Exam	Midterm Exam
9	Phonetics. Phonetic events; sound addition, sound loss, vowel changes, assimilation. Major phonetic harmonies in Turkish words Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews.	
10	General application	

11	Words in terms of meaning and function: Nouns, pronouns Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Writing of "ki" conjunction and "ki" possessive suffix.	
12	Words in terms of meaning and function: Nouns, pronouns Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Writing of "ki" conjunction and "ki" possessive suffix.	
13	Words in terms of meaning and function: Adjectives, adverbs Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Colon usage.	
14	Words in terms of meaning and function: Prepositions, verbals Presentations, poetry, essay, composition, story, newspaper, magazine studies and applications, book reviews. Writing of the question particle "mı, mi, mu, mü". Verbs; verb conjugations, verb tenses, verb persons. Auxiliary verbs, compound verbs. Writing of "da, de" conjunction.	
15	Course summary and review	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Develops a habit of reading books, follows daily newspapers and other periodicals.				X	
2	Identifies words that cause language pollution and understands the impact of culture on language			X		
3	Speaks Turkish correctly, beautifully, and fluently.				X	
4	Presents in front of an audience, expresses information and thoughts effectively, and utilizes efficient communication skills.			X		
5	Understands the significance of the Turkish language among world languages and uses Turkish as a scientific language. Knows the phonetic and historical structure of the Turkish language.				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 makes a moderate contribution to program competencies 2 and 4, and a high-level contribution to competencies 1, 3, and 5.				

COURSE INFORMATION							
Name of Diploma Program: Medical Laboratory Techniques					Course Code: YDİ107		
					Course Name: English-I		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type Compulsory /Elective
1	2		-	2	2	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.		

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 Practise					
Laboratory					
Field Study					
Other Applications					
Final 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 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					
Number	Program Competencies	1	2	3	4
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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1101		
					Course Name: Histology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
1	1	2	-	2	2	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			%80		0
Lecturer		-----					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		-Histology Laboratory Book; Tufan A.Ç.; Nobel Medical Publishing (2019) -Histology Laboratory Companion Book; Korkusuz P. and others; Hacettepe University Publications (2020) -Lecture Notes – Slide Presentations					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		The aim of the course is to teach the histological structure of tissues, organs, and systems in the human body, as well as the basic principles of laboratory equipment, solutions, stains, and preparation techniques used in histology laboratories, both theoretically and practically.					
Course Content		Introduction to Histology and General Concepts, Histological Preparation Techniques, Morphology of Cells and Organelles, Epithelial Tissue (Covering Epithelium), Epithelial Tissue (Glandular Epithelium), Connective and Supporting Tissues, Connective Tissue, Blood Tissue, Cartilage Tissue, Bone Tissue, Muscle Tissue, Nervous Tissue, Structure-Function Relationship of Organ Systems.					
Learning Outcomes of the Course		To recognize the histological structure of organs and tissues in the human body, familiarize with the equipment in histology laboratories, learn to prepare and use basic solutions and stains, develop skills to operate technical devices and perform technical procedures, learn the light microscopic preparation of an organ/tissue sample, and learn to use the light microscope.					
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	1	14	
Out-of-Class Study Time				14	1	14	
Assignments							

Presentation			
Midterm Exams	1	2	2
Project			
Clinical Practice			
Laboratory	14	2	28
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	Introduction to Histology (Tissues)	Macroscopic examination of tissues
2	Parts and operating principles of the light microscope, and its cleaning	Use and cleaning of the light microscope
3	Basic materials and devices used in histology laboratories	Introduction to histology laboratories and equipment
4	Basic stains, chemicals used in histology laboratories, and how to store and archive them	Examination of the chemical storage room(s) and archiving system, use of scales
5	Principles of preparing and storing stains and solutions	Glassware and cleaning
6	General information on fixation, fixatives, and their mechanisms of action	Preparation of fixatives
7	Principles of tissue tracking	Methods of tissue sample collection and fixation
8	Midterm Exam (Quiz)	Midterm Exam
9	Tissue tracking agents and their mechanisms of action	Tissue tracking and embedding
10	Principles of microtomy	Use and cleaning of the microtome
11	Paraffin sections and their uses	Obtaining paraffin sections
12	Frozen sections and their areas of application	Obtaining frozen sections with a cryostat
13	Basic staining procedures	Staining paraffin and frozen sections with hematoxylin-eosin
14	Technical errors and their solutions (Artifacts)	Collagen staining in paraffin sections
15	Safety measures in histology laboratories	Microscopic evaluation of preparations
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Describes the histological characteristics of the tissues in the human body.			X		
2	Learns the equipment in histology laboratories and the processes carried out.				X	
3	Learns to prepare and use basic solutions and dyes.					X
4	Develops the skill to use technical devices and perform technical procedures.					X

5	Learns the preparation of an organ/tissue sample for light microscopic examination.					X
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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 contribute moderately to competency 1, highly to competency 2, and very highly to competencies 3, 4, and 5.				

COURSE SYLLABUS							
Diploma Program Name: Medical Laboratory Techniques					Course Code:TLT1103		
					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)							
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	3	42	
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			90
Credit Workload / 30			3
ECTS Credits of the Course			3

COURSE CATEGORY	
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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1105		
					Course Name: Anatomy		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
1	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		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	4	56	

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			88
Credit Workload / 30			2,93
Course ECTS Credit			3

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 viscerocranium) 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		
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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 contribute at a low level to 1, at a moderate level to 2 and 5, and at a high level to 3 and 4.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Technician					Course Code: TLT1107		
					Course Name: Medical Biology and Genetic		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	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		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	1	1
Project			
Clinical Practice			
Laboratory	14	2	28
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			100
Credit Workload / 30			3,3
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	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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT 1109		
					Course Name: Basic Chemistry		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
1	2	-	-	2	2	Turkish	Cumpulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer		-----					
Teaching Method of the Course							
References		Genel Kimya, Raymon Chang, MC Graw Hill, 2006. POSKOZIM, Paul S. General Chemistry, Principles and Modern Applications, (Petrucchi, Ralph H.; Harwood, William S.) and General Chemistry, (Whitten, Kenneth W.; Davis, Raymond E.; Peck, M. Larry). 1997.					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		The aim is to understand the fundamental principles and concepts of chemistry.					
Course Content		Introduction to chemistry, atoms and atomic theories, chemical compounds and reactions, solutions and solution preparation, gases, thermochemistry, electron structure of the atom, periodic table and some atomic properties, chemical bonds, liquids, solids, and intermolecular forces, chemical kinetics and equilibrium, acids and bases, entropy and free energy					
Learning Outcomes of the Course		To define and explain the fundamental concepts of chemistry and gain analytical thinking skills. Solving problems in chemistry with a systematic approach Being able to view the surrounding events through the lens of chemistry education.					
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	Atoms and Atomic Theory	
2	Chemical Compounds	
3	Chemical Reactions, Introduction to Aqueous Solution Reactions	
4	Gases	
5	Thermochemistry	
6	Electron Structure of the Atom, Periodic Table, and Some Atomic Properties	
7	Chemical Bonding Theories	
8	Midterm Exam	Midterm Exam
9	Liquids, Solids, and Intermolecular Forces	
10	Solutions and Their Physical Properties	
11	Chemical Kinetics and Principles of Chemical Equilibrium	
12	Acids and Bases	
13	Intentional Change: Entropy	
14	Free Energy - 1	
15	Free Energy - 2	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Gains the ability to understand and explain chemistry at a fundamental level, and develops analytical thinking skills.				X	
2	Solves chemical problems with a systematic approach.			X		
3	Recognizes and acquires the necessary skills to use laboratory tools and equipment effectively.			X		
4	Uses the knowledge gained in the field to critically interpret and evaluate scientific data.				X	

5	Understands the importance of lifelong learning, identifies and meets learning needs, and continuously updates themselves by following developments in science and technology.				X	
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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1111		
					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.		
ECTS - WORKLOAD TABLE							
					Duration	Credit	

COURSE EVALUATION SYSTEM	Number	(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	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	
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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
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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques Program					Course Code: TLT1113		
					Course Name: Basic Microbiology and Virology		
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		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		"Basic Medical Microbiology," Patrick R. Murray, Ahmet Başustaoğlu, Ayşe Dürdal Us "Basic Microbiology and Immunology," Prof. Dr. Hakkı Bilgehan "Microbiology Practical Book," Prof. Dr. A. Tevfik Cengiz					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To provide students working in the healthcare field with fundamental knowledge about microorganisms and to allow them to conduct practical applications in microbiology laboratories.					
Course Content		Introduction to Microbiology, History of Microbiology, General Information About Microorganisms, Eukaryotic and Prokaryotic Cells, Differences Between Bacteria and Viruses, Host-Parasite Relationship, Cell Structure in Microorganisms, Types of Microscopes and Their Usage, Bacterial Cell Structure: Bacterial Cell Shapes, Structure of Bacterial Cells (Nucleoid, Cytoplasm, and Cytoplasmic Structures, Cell Wall), Bacterial Surface Formation, Microorganism Reproduction, Acquisition of Metabolic Energy, Fermentation and Respiration, Chemical Structure of Microorganisms, Nutrition and Nutritional Sources, Microorganism Growth Environments, Culture Media (Types, Preparation, Characteristics), Inoculation Methods, Culture Techniques, Bacterial Colony Characteristics, Life Cycle of Microorganisms and Control of Their Reproduction, Bacterial Growth and Reproduction Phases, Sterilization and Disinfection, Sample Collection and Examination Methods for Microbiological Studies, Laboratory Diagnostic Methods in Microbiology, Direct and Indirect Diagnostic Methods, Unstained and Stained Examination Methods (Direct Examination, Gram Staining, ALB Principles), Antimicrobial Drugs, Mechanism of Action and Resistance, Body Resistance and Immunity Against Microorganisms, Antibiotic Susceptibility Tests, Viruses (Structure and Classification, Reproduction, and Genetics), Diagnostic Methods of Viral Diseases, General Information About Fungi and Diagnostic Methods of Fungal Diseases, Commonly Used Tests, Experiments, and Their Interpretations in Microbiology.					
Learning Outcomes of the Course		Acquire 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.	

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	14	2	28
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

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Introduction to Microbiology, History, General Information About Microorganisms, Eukaryotic and Prokaryotic Cells, Differences Between Bacteria and Viruses, Host-Parasite Relationship	General laboratory rules and principles of working in a microbiology laboratory
2	Cell Structure in Microorganisms, Types of Microscopes and Their Usage, Bacterial Cell Structure: Shapes, Structure (Nucleoid, Cytoplasm, Cytoplasmic Structures, Cell Wall), Bacterial Surface Formation	Microscope usage and maintenance
3	Microorganism Reproduction, Metabolic Energy Acquisition, Fermentation, and Respiration	Collection and acceptance of microbiological samples
4	Chemical Structure of Microorganisms, Nutrition, and Nutritional Sources	Macroscopic examination of samples
5	Microorganism Growth Environments, Culture Media (Types, Preparation, Characteristics), Inoculation Methods, Culture Techniques	Staining methods
6	Bacterial Colony Characteristics, Life Cycle of Microorganisms, Control of Reproduction, Bacterial Growth Phases	Media preparation techniques
7	Sterilization and Disinfection, Sample Collection and Examination Methods for Microbiological Studies	Culture and identification methods
8	Midterm Exam	Midterm Exam
9	Laboratory Diagnostic Methods in Microbiology, Direct and Indirect Diagnostic Methods, Unstained and Stained Examination Methods (Direct Examination, Gram Staining, ALB Principles)	Types of antibiograms
10	Body Resistance and Immunity Against Microorganisms, Antibiotic Susceptibility	Sterilization methods

	Tests	
11	General Information on Parasites and Their Diagnostic Methods	Disinfection methods
12	Viruses (Structure and Classification, Reproduction, and Genetics), Diagnostic Methods of Viral Diseases	Serological tests
13	General Information About Fungi and Their Diagnostic Methods	Parasitological methods
14	Commonly Used Tests, Experiments, and Interpretations in Microbiology	Comparative examination of viruses, bacteria, fungi, and parasites
15	Normal Flora of the Human Body	Molecular tests
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 diagnostic methods of microorganisms.				X	
3	Gains the ability to apply microorganism diagnostic methods.				X	
4	Gains general knowledge about sterilization and disinfection.			X		
5	Gains the ability to apply 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 4 and 5, and a high-level contribution to competencies 1,2 and 3.				

FIELD ELECTIVE COURSE SYLLABUSES

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory 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	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 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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: SHM1103		
					Course Name: Infectious Diseases		
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		-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			
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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	
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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 SYLLABUSES

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TRD110		
					Course Name: Turkish Language II		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
2	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		Turkish Language, Anadolu University Publications, No:786, Eskisehir, 2003. Turkish Language Oral and Written Expression, Uğur, A., Express Printing House, Kütahya, 2002.					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		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 Content		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.					
Learning Outcomes of the Course		Knows the shape structure of Turkish and uses spelling-punctuation marks appropriately Acquires the habit of reading books and follows daily newspapers and other periodicals. Speaks Turkish in a correct, beautiful and successful style and has the ability to express himself. Have the ability to make presentations in front of the public, express their knowledge and thoughts at a level that others can understand, and use effective communication. Have the habit of using dictionaries and spelling guides					
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		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	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	Midterm Exam	Midterm Exam
9	Sentence (Types of sentences; Simple sentence, compound sentence, sequential sentence, connected sentence).	
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	General Repeat				
16	Final Exam	Final Exam			
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS					
Number	Program Competencies				
		1	2	3	4
1	Knows the shape structure of Turkish and uses spelling-punctuation marks appropriately.				X
2	Acquires the habit of reading books and follows daily newspapers and other periodicals.			X	
3	Speaks Turkish in a correct, beautiful and successful style and has the ability to express himself.			X	
4	Have the ability to make presentations in front of the public, express their knowledge and thoughts at a level that others can understand, and use effective communication.				X
5	Have the habit of using dictionaries and spelling guides				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 INFORMATION							
Name of Diploma Program: Medical Laboratory Techniques					Course Code: YDİ108		
					Course Name: English-II		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type Compulsory /Elective
2	2	-	-	2	2	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 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	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 Practise			
Laboratory			
Field Study			
Other Applications			
Final 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 Credits			2

COURSE CATEGORY	
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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT 1102		
					Course Laboratory Equipment Usage and Maintenance		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
2	1	2	-	2	2	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			%80		0
Lecturer							
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		1. Clinical Biochemistry Laboratory (with Hematology and Serology Additions) Idris Mehmetoğlu, Mehmet Gürbilek, Osman Çağlayan, Abdurrahim Koçyiğit 2. Internet					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To provide students with the necessary basic knowledge and practical skills related to materials and devices used in health laboratory settings					
Course Content		Operating principles, usage, maintenance, and calibration of materials and devices used in the laboratory					
Learning Outcomes of the Course		Introduction to basic laboratory instruments (microscopes, centrifuges, spectrophotometers, etc.), teaching the correct and safe use of these instruments, understanding the importance of regular maintenance and cleaning, comprehending calibration and control processes, ensuring adherence to laboratory safety rules, developing problem-solving skills, fostering record-keeping habits, and implementing quality control procedures					
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	1	14	
Out-of-Class Study Time				14	1	14	
Assignments							

Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory	14	2	28
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	Laboratory Definition and Characteristics	
2	Rules to be Followed in the Laboratory	
3	Classification of Medical Laboratory Instruments	
4	Introduction of Glass and Plastic Materials Used in Medical Laboratories	
5	Use of Petri Dishes, Pipettes, Tubes, Tube Carriers, Loops, Needles, Swabs, Inoculation Tools, Glass Pipettes and Automatic Pipettes Used in Microbiology	
6	Measurements and Analysis Methods in the Laboratory	
7	Cleaning and Maintenance of Laboratory Materials	
8	Sterilization and Disinfection	
9	Centrifuge and Centrifugation Techniques	
10	Midterm Exam (Visa)	
11	Microscope Types and Features	
12	Water Bath Usage and Working Principles	
13	Use and Working Principles of Oven, Autoclave, Sterilizer	
14	Calibration and Working Principles of ELISA and RIA, PCR, Other Measuring Instruments	
15	Material Presentation / Course Evaluation	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Acts in accordance with basic professional legal regulations related to his/her field.				X	
2	Communicates using professional knowledge and communication technologies.			X		
3	Recognizes laboratory tools and equipment, lists measurement methods.				X	
4	Can select appropriate technological devices and tools during application.				X	

5	Collaborates with other health disciplines by complying with quality management processes.			X		
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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 qualifications 2 and 5, and highly to 1, 3, and 4.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1104		
					Course Name: Laboratory Methods and Safety		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
2	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		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		-Laboratory Services / Laboratory Safety; Ministry of National Education (2015) -Laboratory Techniques and Safety; Tayyar M., Telli N., Çetin K.; Dora Printing and Publishing (2020) -Lecture Notes – Slide Presentation					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		The aim is to raise awareness among students about the basic rules to be followed in the laboratory and the precautions to be taken against physical, chemical, and biological agents that may occur while working in the laboratory.					
Course Content		Things to Consider in the Laboratory, First Aid in Laboratory Accidents, Chemical Substance Nomenclature, Glassware, Plastic, Porcelain, and Other Materials, Basic Equipment, Cleaning of Laboratories and Glassware, Basic Laboratory Procedures, Analytical Methods, Preparation of Solutions, and Concentration Units.					
Learning Outcomes of the Course		To recognize the histological structure of organs and tissues in the human body, familiarize with the equipment in histology laboratories, learn to prepare and use basic solutions and stains, develop skills to operate technical devices and perform technical procedures, learn the light microscopic preparation of an organ/tissue sample, and learn to use the light microscope.					
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	14	2	28
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			88
Credit Workload / 30			2,93
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	Course Description, Objectives, and Workflow	The application of topics covered in theoretical lessons to practice
2	Safe Laboratory Environment, Safety, and Hazard Signs	
3	Personal Safety Precautions (Basic Laboratory Rules)	
4	Personal Safety Precautions (Laboratory Risks)	
5	Chemical Hazard in Laboratories	
6	Measures to Take Against Chemical Hazards	
7	Chemical Waste Management in Laboratories	
8	Mid-Term Exam	Mid-Term Exam
9	Biological Hazards in Laboratories	The application of topics covered in theoretical lessons to practice
10	Measures to Take Against Biological Hazards	
11	Biological Waste Management in Laboratories	
12	Physical Hazards in Laboratories and Precautions (Fire, Electrical Hazards, etc.)	
13	Emergency Situations / Action Plans	
14	Measures Against Flammable, Explosive Materials and Fire Drills	
15	First Aid in Laboratory Accidents	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Has sufficient knowledge about laboratory working rules.				X	
2	Knows the precautions to be taken against potential risks during laboratory work.					X
3	Can take personal safety measures in the laboratory.					X
4	Knows the work discipline and safety in the laboratory, as well as the physical, chemical, and instrumental analysis methods, the properties of the basic tools and equipment used in the laboratory.				X	
5	Knows the methods for preparing solutions to be used in analysis and how to dispose of these chemicals.				X	

6	Knows the first aid precautions in case of laboratory accidents.				X	
7	Has knowledge about the storage of hazardous chemicals.				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 1, 4, 5, 6, and 7 contribute at a high level, while competencies 2 and 3 contribute at a very high level.				

COURSE INFORMATION

Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1106		
					Course Name: Parasitology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
2	2	2	-	3	3	Turkish	Compulsory

Course Prerequisite	Not available		
Attendance Requirement for the Course	Theoretical	Practical	Laboratory
	70%	%80	0

Lecturer	
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Teaching Method of the Course	Lecture, Discussion, Q&A, Case Study, and Presentation.
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References	Unat's Medical Parasitology: Prof. Dr. Ekrem Kadri Unat Medical Parasitology: Prof. Dr. Kürşat Altıntaş Basic Medical Parasitology: Özlem Miman - Gülendame Saygı
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Course Materials (Auxiliary equipment, models, etc.)	
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Objective of the Course	To assess the general characteristics, classification, and diagnostic methods of parasites causing diseases in humans and to provide practical applications in parasitology laboratories.
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Course Content	Introduction to Parasitology and Diagnostic Methods, Protozoa and Diagnostic Methods, <i>E.histolytica</i> , <i>E. coli</i> , <i>Acanthamoeba</i> , <i>Naegleria</i> , Flagellates, <i>Giardia</i> , <i>Trichomonas</i> , Blood and Tissue Flagellates, <i>Leishmania</i> , <i>Plasmodium</i> , <i>Toxoplasma</i> , <i>Isospora</i> , <i>Cryptosporidium</i> , <i>Pneumocystis</i> , <i>Balantidium</i> , <i>Blastocystis</i> , Helminths and Diagnostic Methods, Nematodes, <i>Ancylostoma</i> , <i>Enterobius</i> , <i>Ascaris</i> , <i>Trichuris</i> , <i>Wuchereria</i> , Trematodes, <i>Fasciola</i> , <i>Schistosoma</i> , Cestodes, <i>Taenia</i> , <i>Hymenolepis</i> , <i>Echinococcus</i> , <i>Diphyllobothrium</i> , Arthropods, Mites, <i>Sarcoptes</i> , Insects, Myiasis, <i>Pediculus</i> , <i>Pulex</i> , <i>Cimex</i> .
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Learning Outcomes of the Course	Acquiring basic knowledge about parasites Gaining proficiency in applying diagnostic methods used in parasitology laboratories
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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									
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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	1	1
Project			
Clinical Practice			
Laboratory	14	2	28
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	Introduction to Parasitology and Diagnostic Methods	Sampling and processing
2	Protozoa and Diagnostic Methods, <i>Entamoeba histolytica</i> , <i>Entamoeba coli</i>	Microscope use and maintenance
3	<i>Acanthamoeba</i> , <i>Naegleria</i> , Flagellates	Macroscopic examination of stool
4	Blood and Tissue Flagellates, <i>Trichomonas</i> , <i>Giardia</i> , <i>Leishmania</i>	Preparing stool smear using the direct method
5	<i>Plasmodium</i> , <i>Isospora</i> , <i>Cryptosporidium</i>	Staining stool smear
6	<i>Pneumocystis</i> , <i>Balantidium</i> , <i>Blastocystis</i>	Preparing stool smear using the sedimentation method
7	Helminths and Diagnostic Methods, Nematodes, <i>Toxoplasma</i> , <i>Ancylostoma</i>	Preparing stool smear using the flotation method
8	Midterm Exam	Midterm Exam
9	<i>Enterobius</i> , <i>Ascaris</i> , <i>Trichuris</i> , <i>Wuchereria</i>	Preparing stained smear from body fluids
10	Trematodes, <i>Fasciola</i> , <i>Schistosoma</i>	Preparing blood smear using the thick drop method
11	Cestodes, <i>Taenia</i> , <i>Hymenolepis</i>	Preparing blood smear using the thin smear method
12	<i>Echinococcus</i> , <i>Diphyllobothrium</i>	Preparing and applying cellophane tape preparation
13	Arthropods, Mites, <i>Sarcoptes</i>	Microscopic evaluation of cellophane tape preparation
14	Insects, Myiasis, <i>Pediculus</i> , <i>Pulex</i>	General practice and evaluation
15	Common Diagnostic Methods in Parasitology Laboratories	Practical Exam
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 parasites				X	

2	Understands the classification and diagnostic methods of parasites				X	
3	Gains skills in applying parasite diagnostic methods				X	
4	Explains the mechanisms and epidemiology of parasitic diseases in humans			X		
5	Understands the transmission and prevention methods of 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 4, and a high-level contribution to competencies 1,2,3 and 5.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1108		
					Course Name: Hematology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
2	1	2	-	2	2	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			%80		0
Lecturer							
Teaching Method of the Course		Presentation, Discussion, Question and Answer					
References							
Course Materials (Auxiliary equipment, models, etc.)		Blood					
Objective of the Course		Teaching hematology laboratory tests, blood banking and the tests performed, hematological diseases, hemostasis, and thrombosis.					
Course Content		Blood Physiology					
Learning Outcomes of the Course							
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	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			62
Credit Workload / 30			62/30
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	Introduction to hematology	Hospital application
2	Approach to the patient with hematological disorders.	Hospital application
3	Hematopoiesis	Hospital application
4	Erythrocyte and diseases	Hospital application
5	Leukocytes and diseases	Hospital application
6	Platelets and platelet disorders	Hospital application
7	The coagulation system and its disorders	Hospital application
8	Midterm Exam	Midterm Exam
9	Myeloproliferative diseases, multiple myeloma	Hospital application
10	Lymphoproliferative disorders	Hospital application
11	Bloodletting	Hospital application
12	Blood groups and blood transfusion	Hospital application
13	Hematological tests and their importance	Hospital application
14	Peripheral smear of blood cells	Hospital application
15	Microscopic View of Blood Cells	Hospital application
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies	1	2	3	4	5
1	Approach to the patient with hematological disorders.			X		
2	Learn erythrocyte, leukocyte, platelet-based diseases, blood groups and blood transfusion.					X
3	Learn hematological tests and their importance				X	
4	Learning about peripheral blood cell spreading				X	
5	Learn blood collection procedures					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, a very high-level contribution to program competencies 2, 5 and a high-level contribution to program competencies 3,4.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1110		
					Course Name: Immunology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
2	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, Question and Answer					
References		1.Kindt TJ, Goldsby RA, Osborne BA. Kuby Immunology. New York: W.H. Freeman and Company; 2007. 2.Pier GB, Lyczak JB, Wetzler LM. Immunology, Infection, and Immunity. Washington DC: ASM Press, 2004. 3.Shen W-C, Louie SG. Immunology for Pharmacy Students. Amsterdam: Harwood Academic Publishers, 1999.					
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		To inform students about the general characteristics of the immune system, biological structure and functions of cells and organs functioning in the immune system, antigen and antibody relationships, immunological test methods.					
Learning Outcomes of the Course		At the end of the course students; 1. Learns immune system cells. 2. Learns the types of immunity. 3. Learns immunological tolerance and autoimmunity. 4. Have knowledge about congenital and acquired immune deficiencies. 5. Learns to use immunological findings in different scientific disciplines.					
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 feedbacks received from students through questionnaires and interviews.		
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	General information about the structure of the immune system	
2	Innate and acquired immunity	
3	Cells and organs playing a role in the immune system	
4	Primary lymphoid organs, secondary lymphoid organs	
5	Structure of antigens	
6	Immunoglobulins (general information about structure, isotypes, allotypes, idiotypes, IgG, IgA, IgM, IgD, IgE)	
7	Cellular and humoral immune reactions, acute phase reactants, immunological tolerance, regulation of immune response	
8	Midterm Exam	Midterm Exam
9	Phagocytosis, Antigen processing and presentation	
10	Hypersensitivity Reactions	
11	Vaccines and Immune Serums	
12	Cytokines and complement system	
13	Mucosal immunity, Immunity in infectious diseases	
14	Transplantation immunology, Tumour immunology	
15	Autoimmunity, Immune deficiencies	
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Students who successfully complete the programme are expected to have an understanding of the functions of innate and acquired immunity and basic immunological principles.					X
2	Upon successful completion of the programme, the students are expected to have an understanding of the mechanisms of development of diseases in which the immune system plays a role and which are caused by irregularities in the functioning of the immune system.					X

3	Upon successful completion of the programme, the students are expected to have an understanding of the classification, nomenclature, mechanisms of immunological diseases and basic principles of immune pathology.					X
4	Students who successfully complete the programme are expected to be able to follow new developments in immunology.					X
5	Students who successfully complete the programme are expected to be able to apply the ethical concepts related to the field with sensitivity and to be able to comply with team work and to take part as a member of the team.		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	From 1 to 4 from Programme competencies, there are a very high level of contribution and 5 means a low level of contribution.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1112		
					Course Name: Basic Biochemistry		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
2	3	-	-	3	3	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer							
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	Credit	
					(Hours)	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	
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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT1114		
					Course Name: Clinical Microbiology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
2	2	2	-	3	4	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			80%		0
Lecturer							
Teaching Method of the Course		Lecture, Discussion, Question and Answer, Experiment, Application, Problem Solving, Brainstorming					
References		Microbiology with Diseases by Taxonomy (5th Edition), Robert W. Bauman, Pearson 2016. Basic Medical Microbiology, Patrick R. Murray, Elsevier 2017. https://www.cdc.gov/labtraining/training-courses/basic-microbiology/index.html					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To recognise the general characteristics of microorganisms that are the causative agents of disease in humans, to have information about the ways of transmission and prevention and to evaluate the diseases they cause. Students will have information about how microorganisms are typed in the microbiology laboratory and their roles in infectious diseases, what should be considered when giving antibiotics used in their treatment.					
Course Content		General information about microorganisms, classification of microorganisms, characteristics of bacteria, viruses, parasites and fungi and the infections they often cause will be discussed.					
Learning Outcomes of the Course		At the end of the course students; 1. Knows the general characteristics of microorganisms. 2. Recognises the tools and equipment used in microbiology laboratory. 3. Knows the general characteristics of viruses and common viral infections. 4. Defines fungi and has knowledge about important fungal infections. 5. Knows important microorganisms that cause nosocomial infections.					
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	Credit			
		(Hours)	Workload			
Course Duration	14	2	28			
Out-of-Class Study Time	14	3	42			
Assignments						
Presentation						
Midterm Exams	1	10	10			
Project						
Clinical Practice						
Laboratory	14	2	28			
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			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	Introduction to Clinical Microbiology and Terminology in Clinical Microbiology	Microbiology Laboratory Biosafety Rules				
2	Overview of Agents Structure and Classification of Viruses, Bacteria, Fungi, Parasites	Sample Collection and The Sample’s Submission for Clinical Microbiology Analyses				
3	Staphylococci	Sample Types and Collection Methods-1				
4	Streptococci	Sample Types and Collection Methods -2				
5	Escherichia coli	Sample Types and Collection Methods -3				
6	Salmonella	Microbial Culture Media				
7	Shigella	Cultivation Methods of Microorganisms-I				
8	Midterm Exam	Midterm Exam				
9	Clostridium	Cultivation Methods of Microorganisms-II				
10	Bacillus	Preparing and Staining Bacterial Smears				
11	Mycobacteria	Measurement of Biochemical Activities of Bacteria				
12	Hepatitis Viruses	Methods to Evaluate Bacterial Motility				
13	HIV	Antibiogram Tests				
14	Fungi and their diseases	Enzyme-Linked Immunosorbent Assay (ELISA)				
15	Helminths and their diseases	PCR				
16	Final Exam	Final Exam				
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies	1	2	3	4	5
1	To have sufficient infrastructure in basic laboratory techniques and microbiology, parasitology, clinical microbiology branches; ability to use theoretical and practical knowledge in these fields					X

2	Ability to identify, define, analyse and solve problems that may be encountered in the field of medical laboratory by selecting and applying appropriate methods and techniques					X
3	Ability to select and use modern techniques, tools and information technologies needed for applications related to Medical Laboratory					X
4	Ability to develop new methods, plan and realise projects by using professional knowledge				X	
5	Ability to access information, to search for sources and to use information resources				X	
6	Ability to take individual responsibility, multidisciplinary team work and individual work with self-confidence				X	
7	Awareness of the necessity of lifelong learning; the ability to gain awareness of continuous self-renewal by following developments in science and technology				X	
8	To have the self-confidence and professional competence to communicate effectively and express their ideas in front of the public and to have a foreign language knowledge at a level that can follow the innovations in the field		X			
9	Gaining application skills by observing and evaluating the processes related to the field in the public and private sectors				X	
10	To be aware of professional and ethical rules				X	
11	Ability to use computer software and hardware at the basic level required by the field			X		
12	To have sufficient knowledge and skills in the collection and preservation of data for laboratory diagnosis				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	One to 3 from Program competencies are very high level, 4-7, 9-10 and 12 are high level, 8 is low level and 11 is medium level contribution.				

FIELD ELECTIVE COURSE SYLLABUSES

COURSE INFORMATION							
Name of the Diploma Program: Medical laboratory 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	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		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.
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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	14	2	28
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			3,8
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	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	The program contributes at a low level to competencies 1 and 4, at a moderate level to competencies 2 and 3, and at a very high level to competency 5.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: SHM1104		
					Course Name: Sterilisation		
Semester	TheoreticalHours	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							
Teaching Method of the Course		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 (Auxiliary equipment, 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.		
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	
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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 SYLLABUS

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory 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	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	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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2101		
					Course Name: Public Health		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	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		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	Credit	
					(Hours)	Workload	
Course Duration				14	2	28	
Out-of-Class Study Time				14	3	42	

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			72
Credit Workload / 30			2,4
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	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

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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2103		
					Course Name: Clinical Biochemistry		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
3	2	2	-	3	5	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical	Laboratory	
		70%			%80	0	
Lecturer							
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 & Clinical Biochemistry: Bahaddin ADAM, Aysel KIYICI, Yasemin ARDIÇOĞLU					
Course Materials (Auxiliary equipment, models, etc.)		-					
Objective of the Course		To establish the relationship between basic biochemistry concepts and life, and to explain the correlations of biochemistry with diseases.					
Course Content		Changes occurring in the body during diseases and their effects on laboratory parameters.					
Learning Outcomes of the Course		Establish connections between biochemistry and diseases. Learn methods for determining parameters that change with diseases in the body.					
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							
					Duration	Credit	

COURSE EVALUATION SYSTEM	Number	(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	7	98
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice	14	2	28
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			156
Credit Workload / 30			156 / 30
Course ECTS Credit			5.1

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 Clinical Biochemistry	Hospital Practice
2	Sample Collection (Blood, Urine, Stool, CSF, etc.)	Hospital Practice
3	Factors Affecting Laboratory Results	Hospital Practice
4	Importance of Enzymes in Clinical Diagnosis	Hospital Practice
5	Carbohydrate Metabolism Disorders	Hospital Practice
6	Lipid Metabolism and Atherosclerosis	Hospital Practice
7	Plasma Proteins in Clinical Diagnosis	Hospital Practice
8	Midterm Exam	Midterm Exam
9	Diagnostic Markers for Acute Myocardial Infarction	Hospital Practice
10	Liver Function Tests	Hospital Practice
11	Kidney Function Tests	Hospital Practice
12	Iron Metabolism and Anemias	Hospital Practice
13	Bilirubin Metabolism and Jaundice	Hospital Practice
14	Minerals and Bone Metabolism	Hospital Practice
15	Vitamins and Metabolic Diseases	Hospital Practice
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Ability to select and use modern techniques, tools, and information technologies needed for clinical biochemistry applications				X	
2	Learn methods for determining parameters that change with diseases in the biochemistry laboratory				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 high-level contribution to competencies 1 2.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2105		
					Course Name: Medical Documentation		
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							
					Duration	Credit	

COURSE EVALUATION SYSTEM	Number	(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	
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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2107		
					Course Name: Pathology		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
3	2	2	-	3	4	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			%80		0
Lecturer		-----					
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		-Pathology Laboratory Techniques and Laboratory Methods; Usta U.; Nobel Medical Publishing (2020) -Guide to Understanding Pathology and Pathology Laboratories; Usubütün A.; Ankara Nobel Medical Publishing (2023) -Lecture Notes – Slide Presentation					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		It aims to provide students with general pathology education while introducing and applying the processes related to the operation of the pathology laboratory.					
Course Content		Introduction to Pathology and Cytology - Definition, Histotechnique, Histochemistry, Immunohistochemistry, Cell Injury, Adaptation, Inflammation, Tissue Repair, Fluid-Electrolyte Imbalances, Thrombosis, Shock, Immunological Diseases, Neoplasia.					
Learning Outcomes of the Course		Being able to learn theoretical concepts related to general pathology. Learning the working principles of the pathology laboratory. Learning the procedures to be performed on samples received in the pathology laboratory. Being able to apply safety procedures in the pathology laboratory. Knowing disease cases occurring at the cellular level and being able to compare them with normal cells.					
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	5	5
Project			
Clinical Practice			
Laboratory	14	2	28
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			113
Credit Workload / 30			3,76
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 Pathology	Macroscopic Examination of Tissues
2	Laboratory Techniques	Use and Cleaning of the Light Microscope
3	Cell Injury: General Mechanisms (Apoptosis – Necrosis)	Introduction to Pathology Laboratories and Equipment
4	Cellular Adaptation Disorders, Intracellular Accumulations	Examination of Chemical Substance Room(s) and Archiving System, Use of Balance
5	Acute Inflammations	Glassware and Cleaning
6	Chronic Inflammations	Preparation of Fixatives
7	Amyloidosis, Radiation Injury	Methods of Tissue Sampling and Fixation
8	Midterm Exam	Midterm Exam
9	Hemodynamic Disorders	Tissue Tracking and Embedding
10	Pathology of Genetic Diseases	Use and Cleaning of Microtome
11	Immunopathology	Sectioning Paraffin Blocks
12	Neoplasia: Definition and Classification, Differential Diagnosis of Benign and Malignant Tumors	Frozen Sectioning with Cryostat
13	Cancer Epidemiology, Tumor Spread and Metastasis	Staining Paraffin and Frozen Sections with Hematoxylin-Eosin
14	Etiology of Neoplasia	Collagen Staining in Paraffin Sections
15	Epithelial Tumors, Mesenchymal Tumors	Evaluation of Preparations under the Microscope
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 term pathology.				X	
2	Knows the types of cell adaptation and cell death.			X		
3	Defines acute and chronic inflammation.				X	
4	Lists the characteristics of tumors.			X		

5	Defines genetic, developmental, and systemic diseases.			X		
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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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2109		
					Course Name: Laboratory Applications I		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
3	2	6	-	5	7	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			%80		0
Lecturer							
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 & Clinical Biochemistry: Bahaddin ADAM, Aysel KIYICI, Yasemin ARDIÇOĞLU					
Course Materials (Auxiliary equipment, models, etc.)		-					
Objective of the Course		To provide students with theoretical explanations and practical applications of procedures carried out in various laboratories such as Biochemistry, Hematology, and Blood Bank. The course aims to teach the collection, storage, and analysis methods of different samples through hands-on practice.					
Course Content		Analyses performed in different laboratories.					
Learning Outcomes of the Course		Apply general laboratory techniques used in different laboratories. Prepare samples, necessary chemical solutions, and physical conditions for experiments, analyses, and tests. Perform requested experiments, tests, and analyses using laboratory tools and equipment.					
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	7	98	

Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory	14	6	84
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			212
Credit Workload / 30			212 / 30
Course ECTS Credit			7.07

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Laboratory Rules	Laboratory Rules
2	Laboratory Equipment Introduction	Sample Acceptance
3	Urine Analysis, Serum & Plasma Preparation	Laboratory Tour
4	Factors Affecting Laboratory Results	Equipment Familiarization
5	Laboratory Errors I	Laboratory Adaptation
6	Laboratory Errors II	Hospital Routine Application
7	Sample Collection (Blood, Urine, CSF, etc.)	Sample Acceptance
8	Midterm Exam	Midterm Exam
9	Hemagglutination, Precipitation, ELISA Tests	Autoanalyzer, HPLC Introduction
10	Blood Group Determination, Cross-Match Test	Blood Group Determination
11	Liver & Kidney Function Tests, CSF Analysis	Biochemistry Analyses
12	Blood Collection Techniques, Bleeding Time	Blood Collection
13	Bilirubin Metabolism and Jaundice	Hospital Routine Application
14	Minerals & Bone Metabolism	Hospital Routine Application
15	Vitamins & Metabolic Diseases	Hospital Routine Application
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Number	Program Competencies					
		1	2	3	4	5
1	Applies general laboratory techniques used in different laboratories.				X	
2	Prepares samples, required chemical liquids and mixtures, and physical conditions to be used in experiments, analyses, and tests.				X	
3	Performs the required experiments, tests, and analyses using laboratory tools and equipment.				X	
4	Reports experiment, test, and analysis findings, and carries out follow-up processes.				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 high-level contribution to competencies 1 2, 3, 4.				

FIELD ELECTIVE COURSE SYLLABUS

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: SHM2101		
					Course Name: Environmental Protection		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
3	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		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			3,8
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	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 and 5.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: SHM2103		
					Course Occupational Health and Safety		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
3	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		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	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			3,8
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 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
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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 contributes at a low level to competencies 1 and 4, at a moderate level to competencies 2 and 3, and at a very high level to competency 5.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: SHM2105		
					Course Name: Health Institutions Management		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
3	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.		

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			3,8			
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 SYLLABUS

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					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	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			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	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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2102		
					Course Name: Laboratory Applications-II		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
4	2	6	-	5	7	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			80%		0
Lecturer							
Teaching Method of the Course		Lecture, Discussion, Question and Answer, Experiment, Application, Problem Solving, Brainstorming					
References		Prof. Dr. İdris Mehmetoğlu (2019). Klinik Biyokimya El Kitabı (Hematoloji ve Seroloji Laboratuvarları İlaveli). Nobel Tıp Kitabevleri, 2. Baskı, Ankara					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To show students the applications that they may encounter in laboratories during their professional life. To teach the methods of taking, storing and analysing different samples such as blood, urine, cerebrospinal fluid in a practical way.					
Course Content		Sample collection and processing, Examination of Hematological Preparations, Use of Microscope, Red Blood Cell Counting Method, White Blood Cell Counting Method, Blood Pulp Counting Method, Inorganic Substances in Blood, Viruses and Bacteria in Blood, Urine Microscopy, Renal Function Tests, Liver Function Tests, Use of Turbidimetry, Use of Nephelometer, Use of HPLC Method, Chemiluminescence Method and Its Use.					
Learning Outcomes of the Course		At the end of this course, students will be able to; 1. Examine blood samples successfully. 2. Use the microscope effectively during sample examination. 3. Identify organic and inorganic substances in blood samples. 4. Identify kidney and liver function tests. 5. Know the working principles of laboratory devices.					
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	Credit
		(Hours)	Workload
Course Duration	14	2	28
Out-of-Class Study Time	14	6	84
Assignments			
Presentation			
Midterm Exams	1	10	10
Project			
Clinical Practice			
Laboratory	14	6	84
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			216
Credit Workload / 30			7,2
Course ECTS Credit			7

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Collection of Blood Samples (Venous, Arterial and Capillary Blood), Storage and Applied Procedures	Sample Collection and Processing
2	Obtaining The Serum and Plasma from Whole Blood, Anticoagulants	Examination of Hematological Preparations
3	Routine Biochemical Analyses in Blood. (Glucose, Urea, Creatinine, Bilirubin, Lipid Profile, Plasma Proteins, Enzymes)	Use of Microscope
4	Hematological Analyses. Complete Blood Count, Hemoglobin, Hematocrit, Sedimentation, Peripheral Smear	Red Blood Cell Count Method
5	Bleeding Time, Clotting Time, Prothrombin Time. Cross Match, Direct-Indirect Coombs Tests	White Blood Cell Count Method
6	Liver and Kidney Function Tests	Platelet Count Method
7	Collection and Storage of Urine Samples. Physical, Chemical and Microscopic Analysis of Urine	Inorganic Substances Found in Blood
8	Midterm Exam	Midterm Exam
9	Cerebral-Spinal Fluid (CSF) Analyses	Virus and Bacteria Microscopy in Blood
10	Pleural Fluid Analysis. Transudate and Exudate Analysis	Urine Microscopy
11	Blood Gases, pH, Acid-Base Balance Disorders	Kidney Function Tests
12	Hormone Analysis	Liver Function Tests
13	Tumor Markers	Use of Turbidimetry, Use of Nephelometer
14	Stool Analysis	HPLC Method and Its Use
15	Analysis of Urinary System Stones	Chemiluminescence Method and Its Use
16	Final Exam	Final Exam

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies	1	2	3	4	5
1	Having sufficient background in basic laboratory techniques and medical laboratory branches (biochemistry, microbiology, hematology, parasitology, clinical microbiology, pathology, cytogenetics, etc.); Ability to use theoretical and practical knowledge in these fields					X
2	Ability to determine, define, analyze and solve problems that may be encountered in the field of medical laboratory by selecting and applying appropriate methods and techniques					X
3	Ability to select and use modern techniques, tools and information technologies needed for applications related to Medical Laboratory				X	
4	Ability to develop new methods, implement plans and projects using professional knowledge				X	
5	Ability to access information, conduct resource research and use information sources				X	
6	Ability to take individual responsibility with self-confidence, multidisciplinary teamwork and individual work					X
7	Awareness of the necessity of lifelong learning; the ability to constantly renew oneself by following developments in science and technology			X		
8	To have self-confidence and professional competence to communicate effectively and express one's ideas in front of the public, and to have a foreign language knowledge at a level that allows one to follow innovations in the field	X				
9	To gain application skills by observing and evaluating processes related to the field in the public and private sectors				X	
10	To have awareness of professional and ethical rules			X		
11	To be able to use computer software and hardware at a basic level required by the field			X		
12	To have sufficient knowledge and skills in collecting and preserving data for laboratory diagnosis				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	Program qualifications 1-2, 6 mean very high level, 3-5, 9 and 12 are high level, 7, 10-11 are medium level and 8 is very low contribution.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2104		
					Course Name: Emergency Laboratory Applications		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	ECTS	Language of Instruction	Type: (Compulsory / Elective)
4	2	4	-	4	5	Turkish	Compulsory
Course Prerequisite		Not available					
Attendance Requirement for the Course		Theoretical			Practical		Laboratory
		70%			%80		0
Lecturer							
Teaching Method of the Course		Lecture, Discussion, Q&A, Case Study, and Presentation.					
References		Clinical Microbiological Diagnosis, Bilgehan H., Barış Publishing Clinical Biochemistry Laboratory (Including Hematology and Serology), İdris Mehmetoğlu, Mehmet Gürbilek, Osman Çağlayan, Abdurrahim Koçyiğit					
Course Materials (Auxiliary equipment, models, etc.)							
Objective of the Course		To provide information on Emergency Laboratory Tests necessary for explaining sudden changes in patients' conditions. To ensure practical applications in Emergency Laboratories.					
Course Content		• Sample Collection and Techniques for Biochemical and Microbiological Analyses • Blood Cell Counts • Coagglutination Tests • Hematological Tests • Error Sources Affecting Analyses • Pre-analytical, Analytical, and Post-analytical Error Sources • Principles of Molecular Tests Used for Diagnosing Hematological Disorders • Emergency Laboratory Tests for Myocardial Infarction • Emergency Laboratory Tests for Intensive Care Patients • Emergency Laboratory Tests for Acute Poisoning Cases • Blood Gas Analyses • Point-of-Care (POC) Analyses • Evaluation and Interpretation of Biochemical Test Results					
Learning Outcomes of the Course		Understanding diagnostic methods applied in Emergency Laboratories. Gaining practical skills for application in Emergency Laboratories.					
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	4	56
Assignments			
Presentation			
Midterm Exams	1	1	1
Project			
Clinical Practice			
Laboratory	14	4	56
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			142
Credit Workload / 30			4,73
Course ECTS Credit			5

COURSE CATEGORY

WEEKLY TOPIC HEADINGS

Week	Theoretical Topic Headings of the Course	Practical Topic Headings of the Course
1	Sample Collection and Techniques for Biochemical and Microbiological Analyses	Sample collection and processing
2	Blood Cell Counts, Coagglutination Tests, Hematological Tests	Patient registration
3	Error Sources Affecting Analyses	Organizing the work environment, checking kits, chemicals, reagents, and consumables
4	Pre-analytical Error Sources	Serum separation and biochemical analyses-I
5	Analytical Error Sources	Serum separation and biochemical analyses-II
6	Post-analytical Error Sources	Hormone analyses-I
7	Principles of Molecular Tests Used for Diagnosing Hematological Disorders	Hormone analyses-II
8	Midterm Exam	Midterm Exam
9	Emergency Laboratory Tests for Myocardial Infarction	Urine and stool analyses-I
10	Emergency Laboratory Tests for Intensive Care Patients	Urine and stool analyses-II
11	Emergency Laboratory Tests for Acute Poisoning Cases	Solution and kit preparation-I
12	Blood Gas Analyses	Solution and kit preparation-II
13	Point-of-Care (POC) Analyses	Blood gas and electrolyte analyses-I
14	Evaluation and Interpretation of Biochemical Test Results	Blood gas and electrolyte analyses-II

15	Common Diagnostic Methods in Emergency Laboratory Applications	ELISA device and spectrophotometric measurements				
16	Final Exam	Final Exam				
RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Number	Program Competencies	1	2	3	4	5
1	Understands microbiological analyses used in Emergency Laboratories				X	
2	Understands biochemical analyses used in Emergency Laboratories				X	
3	Gains the ability to apply microbiological analyses in Emergency Laboratories				X	
4	Gains the ability to apply biochemical analyses in Emergency Laboratories				X	
5	Evaluates parameters calculated and measured in biochemical and microbiological analyses in Emergency Laboratories			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 5, and a high-level contribution to competencies 1, 2,3 and 4.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2106		
					Course Name: Interpersonal Relationships		
Semester	Theoretical Hours	Practical Hours	Laboratory Hours	Credits	AKTS	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		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

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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2108		
					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 (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	
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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	Informing 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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2110		
					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					
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		- 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	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	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
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.				

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: TLT2112		
					Course Name: First Aid		
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, 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.		
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	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	The program competencies contribute at a low level to 1, at a moderate level to 2 and 5, and at a high level to 3 and 4.				

FIELD ELECTIVE COURSE SYLLABUS

COURSE INFORMATION							
Name of the Diploma Program: Medical Laboratory 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)
4	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. İcimizdeki Biz “kalite bilincinin temeli”, Geliştiren kitaplar dizisi, İstanbul.1996. 6. Pennebaker, J.W. İcinizi 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	Credit
		(Hours)	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 INFORMATION							
Name of the Diploma Program: Medical Laboratory Techniques					Course Code: SHM2106		
					Course Name: Rational Drug Use		
Semester	TheoreticalHours	Practical Hours	Laboratory Hours	Credits	AKTS	Language of Instruction	Type: (Compulsory / Elective)
4	2	-	-	2	4	Turkish	Elective
Course Prerequisite		Not available					
AttendanceRequirementforthe Course		Theoretical			Practical		Laboratory
		70%			0		0
Lecturer							
TeachingMethod of theCourse		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(Auxiliaryequipment, 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							
MidtermExams					1	40	
Project							
Clinical Practice							
Laboratory							
Field Study							
Other Applications							
Quizzes							
TermPaper / Project							
Portfolio Studies							
Reports							
Learning Diaries							
Final Thesis/Project							
Seminar							
End-of-SemesterExam					1	60	
Others (oral, etc.).							
Total:					2	100	
Contribution of In-SemesterActivitiestothe Final Grade:						40	
Contribution of the Final Examtothe Final Grade:						60	
Whataretheproposedassessmentandevaluationtools in thecontext of thecontinuousimprovement of courses (e.g.,surveys, interviews, etc.) andforwhatpurposearetheyapplied? Please define thepurpose (goalandobjectivesetting / coursecontent / learningneeds / organization of thelearningenvironment / sequenceandcorrelation of topics / materialsandmethods / evaluation of assessmentplanning).					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							
MidtermExams				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	The program contributes at a high level to competency 3 and at a very high level to competencies 1 and 2.				

COURSE SYLLABUS

Diploma Program Name: Medical Laboratory 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)							
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.		

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	The program's competencies contribute at a low level to 1, at a moderate level to 2 and 5, and at a high level to 3 and 4.				

