



EUROPEAN UNIVERSITY OF LEFKE

**DEPARTMENT OF
MEDICINE**

PROGRAMME HANDBOOK

2026

PROGRAM INFORMATION

Program Name and Degree Awarded

Faculty of Medicine and Doctor of Medicine (MD)

Duration of Studies

6 Years

Total Credits / ECTS

360

Language of Instruction

English

Mission and Vision

Mission: The goal of our medical education is to guide the formation of enlightened scholars with originality and competence in research, professional services, and teaching. And to achieve our goal utilizing scientific knowledge of high standards in diagnosis and treatment. Our graduates to be physicians whose priority is to establish good communication with their team in ethical standards

Vision: To be amongst the leaders both nationally and internationally.

Program Objectives

We aim for academically excellent, self-motivated physicians with strong research skills and ethical principles, prioritizing community and individual health within national healthcare policies. Program goals include developing compassionate, competent professionals who can provide high-quality care, conduct research, advocate for public health, and continuously improve throughout their careers.

Program Learning Outcomes

The graduates are expected:

- To develop their own knowledge and skills in clinical medicine, and contribute to others' development, through active participation in tutorials and bedside teaching
- To gain an understanding of disease processes in the area of their elective subject, and how these may present
- To appreciate the influence of social and cultural factors in health and illness
- To meet and socialise with other medical students
- To use time and resources effectively
- To understand the organisation of health care provision in their countries

Curriculum

Year 1

YEAR 1 FALL SEMESTER					
Module Code	Module Name	M/E	T	P	ECTS
MED101	Introduction to Medical Sciences	M	97	36	
MED103	Cells and Tissue Systems	M	107	50	
COM101	English I	M	42	0	
MED100	Turkish I	M	112	0	
MED109	Project	E	20	8	
MED105	Medicine & Art	E	28	0	
MED107	Artificial Intelligence & Medicine	E	28	0	
Total Mandatory Modules					
Total Elective Modules					
Total Fall Semester Modules					
YEAR 1 SPRING SEMESTER					
Module Code	Module Name	M/E	T	P	ECTS
MED102	Cell and Tissue Systems Development	M	100	24	
MED104	Introduction to Clinical Sciences	M	98	30	
COM110	English II	M	42	0	
MED110	Turkish II	M	112	0	
MED112	Sports & Arts	E	28	0	
MED108	Research Project	E	20	8	
MED114	Problem Based Learning	E	28	0	
Total Mandatory Modules					
Total Elective Modules					
Total Spring Semester Modules					

Year 2

YEAR 2 FALL SEMESTER					
Module Code	Module Name	M/E	T	P	ECTS
MED201	Musculoskeletal System and Diseases	M	78	24	
MED203	Nervous System and Diseases	M	155	38	
MED200	Turkish III	M	112	0	
MED209	Research Project II	E	20	8	
MED205	Diseases & Health	E	28	0	
Total Mandatory Modules					
Total Elective Modules					
Total Fall Semester Modules					

YEAR 2 SPRING SEMESTER					
Module Code	Module Name	M/E	T	P	ECTS
MED202	Cardiovascular System and Diseases	M	106	30	
MED204	Respiratory System and Diseases	M	79	24	
MED206	Blood-Immune System and Diseases	M	95	32	
MED210	Turkish IV	M	120	0	
MED208	Project II	E	20	8	
MED214	Occupational Health and Safety in Medicine	E	28	0	
Total Mandatory Modules					
Total Elective Modules					
Total Spring Semester Modules					

Year 3

YEAR 3 FALL SEMESTER					
Module Code	Module Name	M/E	T	P	ECTS
MED301	Gastrointestinal System and Diseases	M	137	34	
MED303	Urogenital System and Diseases	M	132	34	
MED300	Turkish V	M	112	0	
MED309	Project III	E	20	8	
MED305	Medicine and Law	E	28	0	
Total Mandatory Modules					
Total Elective Modules					
Total Fall Semester Modules					

YEAR 3 SPRING SEMESTER					
Module Code	Module Name	M/E	T	P	ECTS
MED302	Introduction to the Clinical Practices	M	91	46	
MED304	Endocrinal System and Diseases	M	110	22	
MED306	Clinic Microbiology and Infectious Diseases	M	78	10	
MED310	Turkish VI	M	112	0	
MED308	Research Project III	E	20	8	
MED314	Medicine and Ethics	E	28	0	
Total Mandatory Modules					
Total Elective Modules					
Total Spring Semester Modules					

Year 4

YEAR 4 (Internship Period I)				
Mandatory Modules				
Module Code	Module Name	M/E	W	ECTS
MED4XX	Internal Medicine	M	8	
MED4XX	Pediatrics	M	8	
MED4XX	Gynecology and Obstetrics	M	5	
MED4XX	General Surgery	M	5	
MED4XX	Cardiology	M	3	
MED4XX	Anesthesiology and Reanimation	M	2	
MED4XX	Public Health	M	2	
MED4XX	Radiology	M	2	
MED4XX	Nuclear Medicine	M	1	
MED4XX	Pediatric Surgery	M	1	
MED4XX	Cardiovascular Surgery	M	1	
Elective Modules				
Module Code	Module Name	M/E	W	ECTS
ELC403	Elective Internship 1	E	2	
ELC404	Elective Internship 2	E	2	
ELC401	Scientific Article Writing Principles I	E		
ELC403	Scientific Article Writing Principles II	E		
ELC402	Scientific Article Writing Steps I	E		
ELC404	Scientific Article Writing Steps II	E		
Total Mandatory Modules				
Total Elective Modules				
TOTAL				

Year 5

YEAR 5 (Internship Period II)				
Mandatory Modules				
Module Code	Module Name	M/E	W	ECTS
MED5XX	Chest Diseases	M	3	
MED5XX	Physical Medicine and Rehabilitation	M	3	
MED5XX	Neurology	M	3	
MED5XX	Dermatology and Venerology/Thoracic	M	3	
MED5XX	Urology	M	3	
MED5XX	Emergency Medicine	M	2	
MED5XX	Forensic Medicine	M	2	
MED5XX	Ophthalmology	M	2	
MED5XX	Otorhinolaryngology	M	2	
MED5XX	Orthopedics and Traumatology	M	2	
MED5XX	Psychiatry	M	2	
MED5XX	Infectious Diseases and Clinical Microbiology	M	2	
MED5XX	Chest Surgery	M	1	
MED5XX	Radiation Oncology	M	1	
MED5XX	Plastic Reconstructive and Aesthetic Surgery	M	1	
MED5XX	Neurosurgery	M	1	
MED5XX	Child and Adolescent Psychiatry	M	1	
MED5XX	Clinic Pharmacology	M	1	
Elective Modules				
Module Code	Module Name	M/E	W	ECTS
ELC503	Seminar	E		
ELC505	Student Case Presentation	E		
ELC501	Elective Internship 1	E	2	
ELC502	Elective Internship 2	E	2	
Total Mandatory Modules				
Total Elective Modules				
Total Elective Internship				
TOTAL				

Year 6

YEAR 6 (Intern Period)				
Module Code	Module Name	M/E	Mo	ECTS
MED6XX	Internal Medicine	M	2	
MED6XX	Pediatrics	M	2	
MED6XX	General Surgery	M	2	
MED6XX	Gynecology and Obstetrics	M	1	
MED6XX	Family Medicine	M	1	
MED6XX	Public Health	M	1	
MED6XX	Emergency Medicine	M	1	
MED6XX	Psychiatry	M	1	
MED6XX	Elective Internship	E	1	
Total Mandatory Internship				
Total Elective Internship				
TOTAL				

THE MINIMUM ECTS REQUIRED TO GRADUATE	
Elective Module ECTS	
Mandatory Module ECTS	
Total Module ECTS	

Abbreviations:

ECTS: European Credit Transfer System

M/E: Mandatory/Elective Modules

Mo: Monthly Internship Duration

P: Practical Hours

T: Theory Hours

W: Weekly Internship Duration

Laboratory and Equipment Capacity (if applicable)

- Laboratory practices were conducted **face-to-face** during the education.
- The **Moodle** online education platform was frequently used for sharing lecture notes, assignments, and exam grades, as in other faculties and departments.
- For online communication, **Microsoft Teams** and **Moodle** were actively used.
- For each course, instructors created a class on Microsoft Teams to share announcements related to lectures, laboratory practices, and examinations with students.

Laboratories and Facilities

1. Dissection Laboratory

Purpose: Anatomy education

Infrastructure:

- Ventilation system: Effectively removes formaldehyde and other chemical vapors; equipped with a negative pressure system to prevent odor and airborne contamination.
- Cooling rooms: Temperature-controlled storage rooms for cadavers, adjustable between -5°C and -10°C.
- Dissection tables: Stainless steel, height-adjustable, with integrated waste and fluid drainage channels; automatic cleaning system for hygiene.
- Cadaver storage and processing unit: Preserved with protective chemicals in specialized sealed cabinets.
- Lighting system: High-intensity LED lights with additional focused lighting for detailed dissections.
- Multimedia-supported education tools: High-resolution screen for recording and projecting dissections to other students.

2. Simulated Patient Laboratories

Location: Faculty of Medicine, ground floor

Purpose: Medical history-taking and physical examination training

3. First Aid and Emergency Laboratory

Location: Faculty of Health Sciences, 1st floor

Purpose: Training for first aid and emergency intervention practices

4. Biochemistry Laboratory

Location: Faculty of Pharmacy

Purpose: Practical sessions for Biochemistry courses

5. Molecular Biology and Genetics Laboratory

Location: Faculty of Pharmacy

Purpose: Practical sessions for Medical Biology courses

6. Pharmaceutical Chemistry Laboratory

Location: Faculty of Pharmacy

Purpose: Equipped with microscopes used for Medical Biology and Genetics applications

7. Chemistry Laboratory

Location: Faculty of Pharmacy

Purpose: Used for DNA isolation and Medical Biology–Genetics applications

Career Opportunities

Faculty of Medicine graduates can work in clinical care (after residency), medical research, healthcare administration, public health, education, and the pharmaceutical or medical device industries. The Pharmaceutical Industry conducts clinical trials, in the Ministry of Health, health organisations, including WHO, pursue academic careers at university hospitals and medical schools, or become pharmaceutical or medical instrument representatives.

Contact Information

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European University of Lefke

Faculty of Medicine

2024-2025

FALL

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Physiology	103
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Credits of the Courses

Code	Course	Credit
MED101	Introduction to Medical Sciences	(6,2)7
MED103	Cells and Tissue Systems	(7,3)8
MED105	Arts & Medicine	(2,0)2
MED107	Artificial Intelligence & Medicine	(2,0)2
MED109	Project I	(2,0)2
MED100	Turkish I	(2,0)2
COM101	English I	(3,0)3
MED201	Musculoskeletal System and Diseases	(6,2)7
MED203	Nervous System and Diseases	(10,3)11
MED205	Diseases & Health	(2,0)2
MED209	Research Project II	(2,0)2
MED200	Turkish III	(2,0)0
COM251	English III	(2,0)2

MED101 Introduction to Medical Sciences

Committee Modules Evaluations

Module Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Basic Principles of Medical Practice	0	18
Behavioral/Social Skills	0	7
Biochemistry	3	20
Biophysics	3	6
Biostatistics	10	15
Communication Skills	4	0
Deontology	0	12
Medical Terminology	0	12
Systematic Anatomy	5	10
Total	25*	100**

Midterm Results: Overall 50%

Individual assessment weights

***Practical grade: 25%**

The percentage of each module's practical evaluation is shown in the table above.

- **Systematic Anatomy and Biostatistics:**

The evaluation of the practical will be done during the practical sessions through

- 1) formative evaluations (quizzes, oral exams, assignments, etc.).
- 2) practical exam at the end of the committee.

- **Biophysics, Biochemistry and Communication Skills:**

The evaluation of the practical will be done during the practical sessions through

- 1) formative evaluations (quizzes, oral exams, assignments, etc.).

****Committee Theoretical Exam: 75%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

****Committee Theoretical Exam: 100%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Basic Principles of Medical Practice

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Basic Principles of Medical Practice	MED101	2024-2025	FALL	17+2	-

Course Language
English

Course Lecturer Details	
Name & Surname	Semra Aslay
E-mail	saslay@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course introduces first-year medical students to the field of medical ethics. The course aims to convey to students the pivotal role ethics holds in medical practice. It introduces the key underlying ethical principles required in medicine. The application of these principles will be brought to life through case based learning (CBL) and additionally through clinical placements from the second year of the course onwards.</p>

Reading List	
No	Textbooks and/or References
1	Core Ethics for Health Professionals: Principles, Issues, and Compliance 1st ed. 2017 Edition, Kindle Edition by Robert F. Phalen (Author), Springer Publishing, UK
2	Virtue Rediscovered: Deontology, Consequentialism, and Virtue Ethics in the Contemporary Moral Landscape Kindle Edition, Nathan Wood (Author) , 2019, 1 st Edition, Lexington Books, US
3	Essentials Of The Principles And Practice Of Medicine, Henrt Hastshorne, Kessinger Publishing, 2010 1 st edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Social Medicine	1,2,3
2	Healthcare system in Students' countries	1,2,3
3	Three basic rules of social medicine	1,2,3
4	Basic concepts of public health	1,2,3
5	Protection and promotion of health	1,2,3
6	Approach to the patient	1,2,3

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
7	Approach to the patient (sample case)	1,2,3

Behavioral & Social Skills

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Behavioral & Social Skills	MED101	2024-2025	Fall	7+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Doğa Eroğlu Şah
E-mail	dsah@eul.edu.tr
Office Hours Schedule	Thursday 10.00 – 11.00
Phone	3585
Office/Room No	ECZ021

Course Objectives
This course aims to equip medical students with key behavioral and social skills. Students will learn how social factors impact health and healthcare access, respect for diversity and learn the influence of physician attitudes toward vulnerable groups. Students will also be introduced medical sociology which brings sociological perspectives/theories, and methods to the study of health, illness, and medical practice.

Reading List	
No	Textbooks and/or References
1	Hinote, B. P. & Wasserman, J. A. (2019). <i>Social and Behavioral Science for Health Professionals</i> . Rowman & Littlefield.
2	Lecture Notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Key Concepts in Health/Medical Sociology	1,2
2	Social and Cultural Diversity	1,2
3	Environmental Health and Interaction	1,2
4	Physician Attitudes Toward Vulnerable Groups (1/2)	1,2
4	Physician Attitudes Toward Vulnerable Groups (2/2)	1,2
5	Addiction Prevention	2

5	Addiction Prevention	2
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Biochemistry

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biochemistry	MED101	2024-2025	FALL	19 + 6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst Prof Dr Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To understand chemical bonds in biology and how molecules are made up. To understand the importance of water and principles of solubility and buffers. To understand the structure and function of nucleic acids, carbohydrates, lipids and proteins. To become familiar with laboratory safety and regulations. To learn about certain laboratory equipment and spectrophotometric analysis.

Reading List	
No	Textbooks and/or References
1	Principles of General, Organic & Biological Chemistry - Janice Gorzynski Smith - Third Edition
2	Biology - Brooker, Windmaier, Graham & Stiling - Fifth Edition
3	Medical Biochemistry - Antonio Blanco & Gustavo Blanco - Second Edition
4	Essentials of Medical Biochemistry – Eun Ha, C. & Bhagavan, N. V. – Third Edition
5	Lecture notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to biochemistry	5
2	Chemical bonds in biology – principles of covalent, non-covalent, and ionic bonding	1, 2, 4, 5
3	Water, solubility, and pH	1, 2, 4, 5
4	Structure and function of nucleic acids	1, 2, 3, 4, 5
5	Structure and function of carbohydrates	1, 2, 3, 4, 5
6	Structure and function of amino acids	1, 2, 3, 4, 5
7	Structure and function of proteins	1, 2, 3, 4, 5
7	Structure and function of lipids (1/2)	1, 2, 3, 4, 5
7	Structure and function of lipids (1/2)	1, 2, 3, 4, 5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
6	Laboratory safety and regulations	5
6	Introduction to laboratory environment and instruments	
7	Principles of spectrophotometry	5

Biophysics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biophysics	MED101	2024-2025	FALL	6+6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Hilmi Yanar
E-mail	hyanar-lau@eul.edu.tr
Office Hours Schedule	09:00-11:00
Phone	-----
Office/Room No	-----

Course Learning Objectives
<p>At the end of this course, students will be able to;</p> <ol style="list-style-type: none">1) describe the properties of ultrasound and characteristics of LASER light;2) explain ultrasound-tissue interactions;3) explain the Doppler effect and its use in ultrasound imaging technique;4) give examples for medical applications of ultrasound and LASER;5) explain X-Ray-tissue interactions;6) explain the physical basis and working principles of Magnetic Resonance Imaging (MRI), X-ray, Ultrasound, Computed Tomography (CT), Single-photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET) imaging techniques;7) compare XRI, Ultrasound, MRI, CT, SPECT and PET;8) explain the neural origins of EEG data and the source of EMG;9) state how EEG and EMG data are recorded;10) classify main EEG waveforms according their frequencies;11) express differences between EEG and evoked potentials;

Reading List	
No	Textbooks and/or References
1	F. Pehlivan, Biophysics, 10 th Edition, 2019.
2	B. H. Brown et al, Medical Physics and Biomedical Engineering.
3	Suzanne Amador Kane, Introduction to physics in modern medicine, 2nd ed., 2009
4	William C. Parke, Biophysics: A Student's Guide to the Physics of the Life Sciences and Medicine, 2020.

5	Jay Newman, Physics of the Life Sciences.
6	Paul Davidovits, Physics in Biology and Medicine, 5th Edition, 2019.
7	Pascal Laugier and Guillaume Haiat, Introduction to the Physics of Ultrasound, 2011.
8	Svelto, O., & Hanna, D. C. (2010). Principles of lasers (Vol. 1, p. 52). New York: Springer.
9	Books, Weser & Purohit, Gunjan & Kothiyal, Pradeep & Jadoun, Manoj. (2022). Laser and its Medical Applications. 10.33545/wb.book.221.
10	Foth, H. J. (2008). Principles of lasers. Lackner M. Lasers in chemistry: probing matter. Weinheim: Wiley-VCH.
11	Thomas, G., & Isaacs, R. (2011). Basic principles of lasers. Anaesthesia & intensive care medicine, 12(12), 574-577.
12	Stenhoff, S., & Mills, J. (2023). Basic principles of lasers. Anaesthesia & Intensive Care Medicine.
13	Schild, Hans H. MRI made easy (... well almost). Berlex Laboratories, 1992.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Ultrasound and its Applications in Medicine	[1-7]
1	Laser and its Applications in Medicine	[1, 5, 6] & [8-12]
2	Endoscopy, X-Rays	[1-6]
2	CT, MRI, SPECT, PET	[1-6] & [13]
3	EEG, EMG	[1]
3	Spectroscopy and Light Sources	[1, 4-6]

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
4	Measuring Instruments	Practical 1
5	Electrophoresis	Practical 2
6	Doppler, Ultrasonography	Practical 3

Biophysics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biophysics	MED101	2024-2025	FALL	6+6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Hilmi Yanar
E-mail	hyanar-lau@eul.edu.tr
Office Hours Schedule	09:00-11:00
Phone	-----
Office/Room No	-----

Course Learning Objectives
At the end of this course, students will be able to; <ol style="list-style-type: none">1) describe the properties of ultrasound and characteristics of LASER light;2) explain ultrasound-tissue interactions;3) explain the Doppler effect and its use in ultrasound imaging technique;4) give examples for medical applications of ultrasound and LASER;5) explain X-Ray-tissue interactions;6) explain the physical basis and working principles of Magnetic Resonance Imaging (MRI), X-ray, Ultrasound, Computed Tomography (CT), Single-photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET) imaging techniques;7) compare XRI, Ultrasound, MRI, CT, SPECT and PET;8) explain the neural origins of EEG data and the source of EMG;9) state how EEG and EMG data are recorded;10) classify main EEG waveforms according their frequencies;11) express differences between EEG and evoked potentials;

Reading List	
No	Textbooks and/or References
1	F. Pehlivan, Biophysics, 10 th Edition, 2019.
2	B. H. Brown et al, Medical Physics and Biomedical Engineering.
3	Suzanne Amador Kane, Introduction to physics in modern medicine, 2nd ed., 2009
4	William C. Parke, Biophysics: A Student's Guide to the Physics of the Life Sciences and Medicine, 2020.

5	Jay Newman, Physics of the Life Sciences.
6	Paul Davidovits, Physics in Biology and Medicine, 5th Edition, 2019.
7	Pascal Laugier and Guillaume Haiat, Introduction to the Physics of Ultrasound, 2011.
8	Svelto, O., & Hanna, D. C. (2010). Principles of lasers (Vol. 1, p. 52). New York: Springer.
9	Books, Weser & Purohit, Gunjan & Kothiyal, Pradeep & Jadoun, Manoj. (2022). Laser and its Medical Applications. 10.33545/wb.book.221.
10	Foth, H. J. (2008). Principles of lasers. Lackner M. Lasers in chemistry: probing matter. Weinheim: Wiley-VCH.
11	Thomas, G., & Isaacs, R. (2011). Basic principles of lasers. Anaesthesia & intensive care medicine, 12(12), 574-577.
12	Stenhoff, S., & Mills, J. (2023). Basic principles of lasers. Anaesthesia & Intensive Care Medicine.
13	Schild, Hans H. MRI made easy (... well almost). Berlex Laboratories, 1992.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Ultrasound and its Applications in Medicine	[1-7]
1	Laser and its Applications in Medicine	[1, 5, 6] & [8-12]
2	Endoscopy, X-Rays	[1-6]
2	CT, MRI, SPECT, PET	[1-6] & [13]
3	EEG, EMG	[1]
3	Spectroscopy and Light Sources	[1, 4-6]

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
4	Measuring Instruments	Practical 1
5	Electrophoresis	Practical 2
6	Doppler, Ultrasonography	Practical 3

Biostatistics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biostatistics	MED101	2024-2025	FALL	14+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Besim Özyel
E-mail	bozyel@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
This course is designed to teach basic statistical knowledge and its use in medical sciences. Students are expected to learn commonly used biostatistical techniques and use them in study design, data collection and interpretation of the findings.

Reading List	
No	Textbooks and/or References
1	Rosner, B. (2015). Fundamentals of biostatistics. Cengage learning
2	Plichta, S. B., Kelvin, E. A., & Munro, B. H. (2013). Munro's statistical methods for health care research. Wolters Kluwer Health/Lippincott Williams & Wilkins.
3	Asst. Prof. Besim Özyel's SPSS Workbook Designed for Medical Sciences

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Biostatistics	1,2,3
1	Descriptive Statistics	1,2,3
2	Hypothesis Testing: One sample Inference	1,2,3
3	Hypothesis Testing: Two sample Inference	1,2,3
4	Non-Parametric Methods	1,2,3
5	Hypothesis Testing: Categorical Data	1,2,3
6	Regression and Correlation	1,2,3
7	Design and Analysis Techniques for Epidemiological Studies	1,2,3

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
4	SPSS Application	1,2,3
5	SPSS Application	1,2,3
6	SPSS Application	1,2,3
7	SPSS Application	1,2,3

Communication Skills

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Communication Skills	MED101	2024-2025	Fall	0+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Zihniye Okray
E-mail	zokray@eul.edu.tr
Office Hours Schedule	Wednesday 10:00-15:00
Phone	2722
Office/Room No	ECZ012

Course Objectives
Learn communication skills in theory and practice.

Reading List	
No	Textbooks and/or References
1	Handouts given by the lecturer.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Communication and Elements of the Communication Process	1
2	Effective and Ineffective Communication Methods	1
3	Body Language and Personal Spaces; Use of 'I' Language	1
4	Empathy and the Concept of Assertiveness in Interpersonal Communication Skills	1

Deontology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Deontology	MED101	2024-2025	FALL	12+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Semra ASLAY
E-mail	saslay@eul.edu.tr
Office Hours Schedule	Friday, 11.00-13.00
Phone	
Office/Room No	CL104

Course Objectives
This course introduces first year medical students to the field of medical ethics. The objective of the course is to convey to students the pivotal role ethics holds in medical practice. It introduces the key underlying ethical principles required in medicine. The application of these principles will be brought to life through case based learning (CBL) and additionally through clinical placements from the second year of the course onwards.

Reading List	
No	Textbooks and/or References
1	Deontology (Elements in Ethics), Author Piers Rawling, 1 st edition, 2023, Cambridge University Press, UK
2	Virtue Rediscovered: Deontology, Consequentialism, and Virtue Ethics in the Contemporary Moral Landscape Kindle Edition, Nathan Wood (Author) , 2019, 1 st Edition, Lexington Books, US

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Definition and history	1,2
2	Basic ethical principles	1,2
3	Deontology, medical ethics, bioethics	1,2
4	Healthcare worker rights	1,2

5	Patient rights	1,2
6	Privacy, confidentiality of information	1,2

Medical Terminology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Medical Terminology	MED101	2024-2025	FALL	12+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rasime Kalkan
E-mail	rkalkan@eul.edu.tr
Office Hours Schedule	Tuesday 14:00-17:00
Phone	-
Office/Room No	CL109

Course Objectives
The aim is to provide in-depth instruction in recognizing and forming medical terms. Students will learn and apply medical root words, prefixes, and suffixes to the body systems. At the end of the course, students can: 1) Identify the basic structure of medical words, including prefixes, suffixes, roots, combining forms, and plurals. 2) Identify medical terminology related to the anatomy and physiology of the human body. 3) Identify the rules for building medical terms and the connection between the term and its relationship to anatomy and physiology.

Reading List	
No	Textbooks and/or References
1	Allan, D.A., Basco, R.C.,2019, Medical Language For Modern Health Care 4th Edition
2	Hull, M., 2013, Medical Language Terminology in Context
3	Bostwick, P., 2024, Medical Terminology Learning Through Practice, Second Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Medical Terminology	1, 2
2	Human Body in Health and Disease	1, 2
3	Skin: Integumentary System, Digestive System, Urinary System	1, 2
4	Nervous System, Cardiovascular System, Blood, Lymphatic and Immune System	2, 3

5	Skeletal System and Respiratory System	2, 3
6	The Languages of Ophthalmology and Otology, Endocrine System	1, 2

Systematic Anatomy

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Systematic Anatomy	MED101	2024-2025	FALL	10+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Musa Muhtaroglu
E-mail	mmuhtaroglu@eul.edu.tr
Office Hours Schedule	Wednesday, 11:00 AM - 2:00 PM
Phone	05428540684
Office/Room No	+90 392 660 2000/

Course Objectives

Reading List	
No	Textbooks and/or References
1	Drake, R. L., Vogl, A. W., Mitchell, A. W. M. (2023). Gray's Anatomy for Students (5th ed.). Elsevier.
2	Netter, F. H. (2022). Netter Atlas of Human Anatomy: Classic Regional Approach (8th ed.). Elsevier.
3	Paulsen, F., Waschke J. (2023). Sobotta Atlas of Anatomy: English/Latin: General Anatomy and Musculoskeletal System; Internal Organs; Head, Neck and Neuroanatomy (17th ed.). Urban & Fischer.
4	Schünke, M., Schulte, E., Schumacher, U. (2020). Atlas of Anatomy, Three Volume Set (3rd ed.). Thieme.
5	Standring, S. (2020). Gray's Anatomy: The Anatomical Basis of Clinical Practice (42nd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Systematic Anatomy	1
1	The Locomotor System (Part 1)	1,2,3
2	The Locomotor System (Part 2)	2,3,4
2	The Circulatory System	1,2,3
3	The Respiratory System	2,3,4,5
3	The Gastrointestinal System	2,3,4
4	The Urogenital System	2,3,5
4	The Nervous System (Part 1)	3,4,5
5	The Nervous System (Part 2)	3,4,5
5	The Endocrine System and Sensory Organs	1,4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
6	Locomotor System and Circulatory System Practices	3,4
7	Internal Organs Study	3,4,5
7	Nervous System and Sensory Organs Practices	3,5

MED103 Cell and Tissue Systems

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Anatomy	8	8
Behavioral & Social Skills	0	8
Biochemistry	5	23
Biophysics	3	8
General Histology	10	24
Medical Biology	4	29
Total	30*	100**

Midterm Results: Overall 50%

Individual assessment weights

*Practical grade: 30%

The percentage of each module's practical evaluation is shown in the table above.

- **Anatomy and General Histology:**

The evaluation of the practical will be done during the practical sessions through

- 3) formative evaluations (quizzes, oral exams, assignments, etc.).
- 4) practical exam at the end of the committee.

- **Biochemistry, Biophysics and Medical Biology:**

The evaluation of the practical will be done during the practical sessions through

- 2) formative evaluations (quizzes, oral exams, assignments, etc.).

**Committee Theoretical Exam: 70%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

**Committee Theoretical Exam: 100%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Anatomy

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Anatomy	MED103	2024-2025	FALL	8+12	-

Course Language
English

Course Lecturer Details	
Name & Surname	Musa Muhtaroglu
E-mail	mmuhtaroglu@eul.edu.tr
Office Hours Schedule	Wednesday, 11:00 AM - 2:00 PM
Phone	05428540684
Office/Room No	+90 392 660 2000/

Course Objectives

Reading List	
No	Textbooks and/or References
1	Drake, R. L., Vogl, A. W., Mitchell, A. W. M. (2023). Gray's Anatomy for Students (5th ed.). Elsevier.
2	Netter, F. H. (2022). Netter Atlas of Human Anatomy: Classic Regional Approach (8th ed.). Elsevier.
3	Paulsen, F., Waschke J. (2023). Sobotta Atlas of Anatomy: English/Latin: General Anatomy and Musculoskeletal System; Internal Organs; Head, Neck and Neuroanatomy (17th ed.). Urban & Fischer.
4	Schünke, M., Schulte, E., Schumacher, U. (2020). Atlas of Anatomy, Three Volume Set (3rd ed.). Thieme.
5	Standring, S. (2020). Gray's Anatomy: The Anatomical Basis of Clinical Practice (42nd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	General Information on Bones and the Skeleton	
1	Bones of the Upper Limb	
2	Vertebral Column and Thoracic Bones	
2	Bones of the Lower Limb	1,2
3	Cranial Bones (Part 1)	3,4
3	Cranial Bones (Part 2)	3,4
4	Complete Skull Structure (Part 1)	3,4,5
4	Complete Skull Structure (Part 2)	3,4,5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Bones of the Upper Limb	1,2,3,4,5
4	Vertebral Column	1,2
4	Thoracic Bones	3,4
5	Bones of the Lower Limb and Pelvis	1,2
5	Cranial Bones	4,5
7	Complete Skull Structure	4,5

Behavioral & Social Skills

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Behavioral & Social Skills	MED103	2024-2025	Fall	9+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Doğa Eroğlu Şah
E-mail	dsah@eul.edu.tr
Office Hours Schedule	Thursday 10.00 – 11.00
Phone	3585
Office/Room No	ECZ021

Course Objectives
This course aims to equip medical students with key behavioral and social skills. It focuses concepts of health inequality, health indicators, and community and family health. Students will learn topics such as social/global inequality and health indicators, climate change, globalization and health, health inequalities, health issues in priority/disadvantaged groups, as well as health status including physical and mental activity.

Reading List	
No	Textbooks and/or References
1	Hinote, B. P. & Wasserman, J. A. (2019). <i>Social and Behavioral Science for Health Professionals</i> . Rowman & Littlefield.
2	Lecture Notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Health status	1,2
1	Health status	1,2
2	Social determinants of health	1,2
2	Health Inequality	1,2
3	Health in Priority/Disadvantaged Groups	1,2
3	Health in Priority/Disadvantaged Groups	1,2
4	Climate Change, Globalization, and Health	1,2
4	Climate Change, Globalization, and Health	1,2
5	Community and family health	1,2

Biochemistry

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biochemistry	MED103	2024-2025	FALL	25 + 10	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst Prof Dr Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To learn about bioenergetics and how metabolic reactions release or absorb energy. To understand the principles of enzymes, their mechanism of action, importance of enzyme structure, regulation of enzymes, enzyme kinetics and enzyme inhibition mechanisms. To become familiar with clinical enzymology and how enzymes can be used to diagnose and monitor disease progression. To become familiar with concepts and mechanisms such as oxidative stress and the role of antioxidants in the body. To become familiar with mitochondrial stress, endoplasmic reticulum stress, unfolded protein response and disease development. To learn about cell death mechanism and stages of xenobiotic metabolism.

Reading List	
No	Textbooks and/or References
1	Medical Biochemistry - Antonio Blanco & Gustavo Blanco - Second Edition
2	Essentials of Medical Biochemistry – Eun Ha, C. & Bhagavan, N. V. – Third Edition
3	Harper’s Illustrated Biochemistry – Kennely, P.J., Botham K.M., McGuinness, O., Rodwell, V.W. & Weil, P.A. – Thirty second Edition
4	Lecture notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Bioenergetics	1, 2, 3, 4
1	Enzymes – Mechanism of action and enzyme kinetics	1, 2, 4
1	Enzymes – Regulation and inhibition mechanisms	1, 2, 4
2	Clinical enzymology	1, 4
2	Biological membranes – principles of molecular transport across biological membranes	1, 3, 4
2	Biological membranes – Junctions, adherence molecules and receptors on the cell membrane	1, 3, 4
3	Oxidative Stress	1, 4
3	Antioxidants	1, 4
4	Endoplasmic reticulum stress and associated biochemical basis of diseases	4
4	Mitochondrial stress	4
5	Xenobiotic metabolism	2, 3, 4
6	Cell death mechanisms	1, 4
7	Revisiting the important points covered throughout the module	

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Principles of concentration calculations in the laboratory	
2	Principles of using pipettes and preparing dilutions in the laboratory	
3	Casein isolation from milk	
4	Determination of blood groups by using antibody solutions	
5	Quiz	

Biophysics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biophysics	MED103	2024-2025	FALL	8+6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Hilmi Yanar
E-mail	hyanar-lau@eul.edu.tr
Office Hours Schedule	09:00-11:00
Phone	-----
Office/Room No	-----

Course Learning Objectives
<p>At the end of this course, students will be able to;</p> <ol style="list-style-type: none">1) define the concepts of heat and temperature and expresses the differences between them;2) explain the behavior of water in different temperature ranges;3) explain heat transfer mechanisms in the human body;4) calculate the rate of heat loss of the human body by conduction, radiation and convection;5) explain the laws of thermodynamics;6) calculate the work efficiency of the body;7) calculate how much a person's body temperature changes if the basal metabolic rate and heat loss rate are known;8) classify and describe the radiation according to its type and energy;9) give examples of ionizing and non-ionizing radiations;10) define indirect and direct ionizing radiation and give examples;11) explain the interactions between electromagnetic ionizing radiation and matter;12) explain radioactive decay mechanisms and the production of ionizing radiation;13) state and compare the physical quantities and units used for radiation;14) calculate the half-life for radioactive sources and the activity of radioisotopes used in medical applications;15) list the natural and artificial radiation sources;16) explain the effects of ionizing and non-ionizing radiations on the human body;17) give examples of deterministic and stochastic effects of ionizing radiation;

- 18) explain ways to protect from ionizing radiation;
 19) recall radiation dose limits for occupational and individual members of public;

Reading List	
No	Textbooks and/or References
1	F. Pehlivan, Biophysics, 10 th Edition, 2019.
2	Paul Davidovits, Physics in Biology and Medicine, 5th Edition, 2019.
3	William C. Parke, Biophysics: A Student's Guide to the Physics of the Life Sciences and Medicine, 2020.
4	Kirsten Franklin et al., Introduction to Biological Physics for the Health and Life Sciences, 2nd Edition, 2019.
5	Alpen, Edward L. Radiation biophysics. Academic press, 1997, 2 nd Edition.
6	Abdelhamid H. Elgazzar, Nafisah Kazem, Biological Effects of Ionizing Radiation, chapter 23.
7	Johnson, Thomas E. Introduction to Health Physics. McGraw Hill Education, 2017, 5 th Edition.
8	Glaser, Roland. Biophysics: an introduction. Springer Science & Business Media, 2012.
9	Podgoršak, E. B. Radiation physics for medical physicists, Berlin: Springer, 2006.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Bioenergetics and Thermodynamics (1/2)	[1-4]
1	Bioenergetics and Thermodynamics (2/2)	[1-4]
2	Radiation Biophysics (1/2)	[1-9]
2	Radiation Biophysics (2/2)	[1-9]
3	Mechanism of Action of Radiation at Cell Level	[1-9]
3	Radioactivity, Activity and Half-Life	[1-9]
4	Biological Effects of Non-Ionizing Radiation and Principles of Radiation Protection	[1-9]
4	Biological Effects (Somatic and Genetic) of Ionizing Radiation	[1-9]

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Calculation of human body heat loss rate, core temperature change and work efficiency	Practical 1
6	Radioactivity, Activity and Half-Life	Practical 2
7	Revision	Practical 3

General Histology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
General Histology	MED103	2024-2025	FALL	26+14	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Ayşe Ertay
E-mail	ayertay@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	CL106

Course Objectives
The aim is to provide an introduction to medical histology and understand each tissue type and related diseases

Reading List	
No	Textbooks and/or References
1	Vasudeva, N. & Mishra, S. 2004, Inderbir Singh's Textbook of Human Histology with Colour Atlas and Practical Guide, Seventh Edition
2	Mescher, A. L. 2018, Junqueira's Basic Histology Text & Atlas, Fifteenth Edition
3	Ovalle, Q. K & Nahirney, P. C. 2021, Netter's Essential Histology with Correlated Histopathology, Third Edition
4	Mescher, A. L. 2011, Lange Basic Histology Flash Cards
5	Ovalle, Q. K & Nahirney, P. C. 2013, Netter's Histology Flash Cards, Updated Edition
6	Thavarajah R, Mudimbaimannar VK, Elizabeth J, Rao UK, Ranganathan K. Chemical and physical basics of routine formaldehyde fixation. J Oral Maxillofac Pathol. 2012 Sep;16(3):400-5
7	Dey, P. (2018). Fixation of Histology Samples: Principles, Methods and Types of Fixatives. In: Basic and Advanced Laboratory Techniques in Histopathology and Cytology. Springer, Singapore.
8	Aziz, S.J., Zeman-Pocrnich, C.E. (2022). Tissue Processing. In: Del Valle, L. (eds) Immunohistochemistry and Immunocytochemistry. Methods in Molecular Biology, vol 2422. Humana, New York, NY

9	Taqi SA, Sami SA, Sami LB, Zaki SA. A review of artifacts in histopathology. J Oral Maxillofac Pathol. 2018 May-Aug;22(2):279. doi: 10.4103/jomfp.JOMFP_125_15
10	Hussein IH, Raad M, Safa R, Jurjus R, Jurjus A (2015) Once Upon a Microscopic Slide: The Story of Histology. J Cytol Histol 6:377
11	Chen X, Zheng B, Liu H. Optical and digital microscopic imaging techniques and applications in pathology. Anal Cell Pathol (Amst). 2011;34(1-2):5-18

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Histology: History & Introduction	1, 2, 3
1	Microscopy Types	1, 2, 3
2	Epithelial Tissue (1/2)	1, 2, 3
2	Epithelial Tissue (2/2)	1, 2, 3
3	Connective Tissue & Adipose Tissue	1, 2, 3
3	Cartilage Tissue	1, 2, 3
4	Bone Tissue	1, 2, 3
4	Blood: Lymphatics & Lymphoid Tissue	1, 2, 3
5	Muscle Tissue	1, 2, 3
6	Nerve Tissue & Nervous System (1/2)	1, 2, 3
6	Nerve Tissue & Nervous System (1/2)	1, 2, 3
7	Revision	

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Histotechniques and Microcopy	6, 7, 8, 9
2	Epithelial Tissue	4, 5
3	Connective Tissue & Adipose Tissue	4, 5
4	Cartilage Tissue & Bone Tissue	4, 5
5	Blood & Muscle Tissue	4, 5
6	Nerve Tissue	4, 5
7	Practical Quiz	

Medical Biology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Medical Biology	MED103	2024-2025	FALL	31+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rasime Kalkan Asst. Prof. Dr. Ayşe Ertay
E-mail	rkalkan@eul.edu.tr ayertay@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	CL109 CL106

Course Objectives
The aim is to provide an introduction to molecular biology and molecular genetics. The learning outcomes of this course are 1) to understand the cell; 2) to understand the organelles of the cells, their function/mechanisms and related diseases.

Reading List	
No	Textbooks and/or References
1	Albert et al., 2022, Molecular Biology of the Cell, Seventh Edition
2	Lodish et al., 2021, Molecular Cell Biology, Ninth Edition
3	Mescher, A. L. 2018, Junqueira's Basic Histology Text & Atlas, Fifteenth Edition
4	Nussbaum, R.A., 2015, Thomson&Thomson, Genetics in Medicine, 8th Edition
5	Cooper,G., et. Al., 2022, The Cell: A molecular Approach, 9th Edition
6	Barresi and Gilbert, 2023, Developmental Biology 13th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Organelles: Nucleus, Mitochondria, Peroxisome, the Others, and the Diseases (Asst. Prof. Dr. Ayşe Ertay)	3
1	The Cell: Definition, Evolution & Organisation (Prof. Dr. Rasime Kalkan)	1,5
2	Cell Membrane (Asst. Prof. Dr. Ayşe Ertay)	2
2	Visualizing of Cells: Cell Culture Techniques and Hybrid Cells (Prof. Dr. Rasime Kalkan)	2
2	Molecular Basis of Cell Differentiation (Prof. Dr. Rasime Kalkan)	6
3	Membrane Transport (Asst. Prof. Dr. Ayşe Ertay)	1,2
3	DNA, Chromatin Structure, Function, Nucleus and Nucleus Diseases (Prof. Dr. Rasime Kalkan)	4,5
4	Intracellular Organisation and Protein Sorting (Asst. Prof. Dr. Ayşe Ertay)	1,2
4	Chromosome Structure, Function, and Nucleosome (Prof. Dr. Rasime Kalkan)	4,5
5	Endomembrane System (ER, Golgi, Ribosome, Lysosome– Protein Trafficking) and the Diseases (Asst. Prof. Dr. Ayşe Ertay)	1,2
5	Cell cytoskeleton (Asst. Prof. Dr. Ayşe Ertay)	1,2
5	The Biology of Stem Cells (Prof. Dr. Rasime Kalkan)	
6	Cell Junctions and Extracellular Matrix (ECM) (Asst. Prof. Dr. Ayşe Ertay)	1,5
6	Cell Signalling (Asst. Prof. Dr. Ayşe Ertay)	1,2
7	Molecular Basics of Cell Aging (Asst. Prof. Dr. Ayşe Ertay)	1
7	Cell Death Mechanisms (Asst. Prof. Dr. Ayşe Ertay)	1
7	Mitochondria (Genome and Function) (Prof. Dr. Rasime Kalkan)	4,5
7	Immunobiology (Asst. Prof. Dr. Ayşe Ertay)	1

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
6	Achieving the Skill of Using a Microscope (Prof. Dr. Rasime Kalkan; Asst. Prof. Dr. Ayşe Ertay; 2 Hours)	Practical 1
6	Human Chromosome Microcopy (Prof. Dr. Rasime Kalkan; Asst. Prof. Dr. Ayşe Ertay; 2 Hours)	Practical 2
7	DNA Isolation, PCR and Electrophoresis (Prof. Dr. Rasime Kalkan; Asst. Prof. Dr. Ayşe Ertay; 2 Hours)	Practical 3

7	Patient Cases and Reporting the disease by using PCR (Prof. Dr. Rasime Kalkan; Asst. Prof. Dr. Ayşe Ertay; 2 Hours)	Practical 4
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Electives Syllabus

Medicine & Art

EUROPEAN UNIVERSITY OF LEFKE- Faculty of Medicine								
MED105 Art and Medicine								
SYLLABUS								
2024-2025 Fall Semester								
Course Code		Course Type	Weekly Course Hours			Credits	ECTS	Weekly Time Schedule
			T	A	L			
MED 105	Art and Medicine		2	0	0			Thursday 10:00-11:00
Prerequisite		Prerequisite to						
Course Lecturer	Prof. Dr. Rümeyşa Demirdamar				Office Hours Schedule		Wednesday 10:00-13:00	
E-mail	rdemirdamar@eul.edu.tr							
Phone					Office / Room No		C 010	
Teaching Assistant(s)	-				Phone		-	
E-mail	-				Office / Room No		-	
Course Objectives	Art and Medicine course aims to improve and enhance the medical students' observation skills, by combining art and medicine to creatively advance patient care							
Textbooks and/or References	1)	Medicine and Art, Hodden Edu Pub 2002						
	2)	Art of Medicine, Univ Chicago Press, 2012						
	3)	Medicine , Health and Arts Routledge 2014						
WEEK	Date	TOPICS					Books/Ref	
Week 1		Introduction to Medicine and Art					Ref 1	
Week 2		How art was incorporated into medical education					Ref 1	
Week 3		How art improves observation skills					Ref 1&3	
Week 4		Importance of Observation Skills in Medicine					Ref 1 & 2	
Week 5		Examples of Art: Michaelangelo					Ref 1	
Week 6		Examples of Art:Leonardo DaVinci					Ref 1	
Week 7		MIDTERM WEEK						
Week 8		Art for therapy					Ref 3 & 2	
Week 9		Painting, dance, acting in therapy					Ref 3 & 2	

Week 10		Parkinson's Disease and using dancing for therapy				Ref 3 & 2
Week 11		Use of Art in Psychology and Psychiatry				Ref 3 & 2
Week 12		Depression and art therapy				Ref 3 & 2
Week 13		Final Exam				
Week 14						
Week 15						
Evaluation Tools	Evaluation Tool	Quantity	Date	Weight in Total (%)	Weight in Semester Evaluation (%)	
	Committee Exam	1				
	Semester Evaluation			100		
	Midterm(s)					
	Quiz(zes)					
	Project(s)					
	Homework(s)					
	Laboratory					
Other						
*** Lifelong Learning Programme (LLP) ***				Language of Instruction:		
Evaluation Tool	Quantity	Student Workload Hours		Evaluation Tool	Quantity	Student Workload Hours
Theoretical Hours				Applied Hours		
Midterm				Final		
Quiz				Project		
Laboratory				Homework		
Atelier				Seminar		
Field Study				Presentation		
Other				Self Study		
TOTAL :						
Recommended ECTS Credit (Total Hours / 25) :						

Artificial Intelligence & Medicine

EUROPEAN UNIVERSITY OF LEFKE- Faculty of Medicine								
MED107 Artificial Intelligence & Medicine								
SYLLABUS								
2024-2025 Fall Semester								
Course Code	Course Name	Course Type	Total Course Hours			Credits	ECTS	Weekly Time Schedule
			T	A	L			
MED107	Artificial Intelligence & Medicine		28	0	0	2		Friday 14:00-17:00
Prerequisite		Prerequisite to						
Course Lecturer	Asst. Prof. Dr. Ayşe ERTAY				Office Hours Schedule	Friday 14:00-17:00		
E-mail	ayertay@eul.edu.tr							
Phone					Office / Room No	CL-106		
Teaching Assistant(s)	-				Phone	-		
E-mail	-				Office / Room No	-		
Course Objectives	The aim is to provide an introduction to Artificial Intelligence, understand it's benefits and where it can be used in medicine							
Learning Outcomes								
Text Books and/or References	1)	Amisha, Malik P, Pathania M, Rathaur VK. Overview of artificial intelligence in medicine. J Family Med Prim Care. 2019 Jul;8(7):2328-2331						
	2)	Buch VH, Ahmed I, Maruthappu M. Artificial intelligence in medicine: current trends and future possibilities. Br J Gen Pract. 2018 Mar;68(668):143-144						
	3)	Alowais, S.A., Alghamdi, S.S., Alsuhebany, N. et al. 2023, Revolutionizing healthcare: the role of artificial intelligence in clinical practice. BMC Med Educ 23, 689.						
	4)	Shorten, C., Khoshgoftaar, T.M. & Furht, B. 2021, Deep Learning applications for COVID-19. J Big Data 8(1), 18.						
	5)	Huang, C., Clayton, E.A., Matyunina, L.V. et al. 2018, Machine learning predicts individual cancer patient responses to therapeutic drugs with high accuracy. Sci Rep 8, 16444.						
	6)	Gao KY, Fokoue A, Luo H, Iyengar A, Dey S & Zhang P. 2018, Interpretable drug target prediction using deep neural representation. IJCAI; 3371–3377.						
	7)	Yala, A., Mikhael, P.G., Lehman, C. et al. 2022, Optimizing risk-based breast cancer screening policies with reinforcement learning. Nat Med 28, 136–143.						
	8)	Lecture notes						
WEEK	Date	TOPICS					Reference No - Section	

Week 1	04.10.2024	Introduction			1	
Week 2	11.10.2024	AI & Medicine			1; 2	
Week 3	18.10.2024	AI & Health Care			3; 4; 5; 6	
Week 4	25.10.2024	Machine Learning			8	
Week 5	25.10.2024	AI in Diagnostics			3	
Week 6	01.11.2024	AI and Screening			7	
Week 7	08.11.2024	Revision				
Week 8		Midterm Exam				
Week 9	29.11.2024	Optimizing risk-based breast cancer screening policies with reinforcement learning			7	
Week 10	06.12.2024	AI in 3D printing			8	
Week 11	13.12.2024	AI in Neurology			8	
Week 12	20.12.2024	AI in Robotic surgery			8	
Week 13	27.12.2024	AI in Dermatology			8	
Week 14	03.01.2025	AI in Nanomedicine			8	
Week 15	10.01.2025	Final Exam				
Evaluation Tools	Evaluation Tool	Quantity	Date	Weight in Total (%)	Weight in Semester Evaluation (%)	
	Final Exam	1	10.01.2025	60		
	Semester Evaluation					
	Midterm(s)	1	16.11.2024-24.11.2024	20		
	Quiz(zes)					
	Project(s)					
	Homework(s)	1	27.12.2024	20		
	Participation					
Presentations						
*** Lifelong Learning Programme (LLP) ***				Language of Instruction:	English	
Evaluation Tool	Quantity	Student Workload Hours		Evaluation Tool	Quantity	Student Workload Hours
Theoretical Hours	28	56.0		Applied Hours		
Midterm	1	1.0		Final	1	2.0

Midterm Study	1	25.0		Final Study	1	50.0
Quiz				Project		
Laboratory				Homework	1	8.0
Atelier				Seminar		
Field Study				Presentation		
Other	1	10.0		Self Study	14	28.0
TOTAL :						180.0
Recommended ECTS Credit (Total Hours / 30) :						6

Project I

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Project I	MED109	2024-2025	Fall	28	2

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rümeyşa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	2802
Office/Room No	

Exam Evaluation	
Midterm Report	50%
Final Report: Poster Presentation	50%

Course Objectives
1) To teach how should be the format and how to make the layout of the report. 2) To highlight where the students can find the sources/references for the report. 3) To teach why the referencing/plagiarism is important in the report.

Reading List	
No	Textbooks and/or References
1	Papers related to the topics

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introducing the scientific report	1
2	Deciding the topic and title of the report	1
3	Scientific sources/papers	1
4	Referencing style for the report	1
5	How to write an abstract	1
6	How to write the main body	1

7	How to arrange/organize the report on the PowerPoint or Word	1
8	Midterm Exam	
9	Self-Study to prepare the report and discussion with the supervisor- Draft 1	1
10	Self-Study to prepare the report and discussion with the supervisor- Draft 2	1
11	Self-Study to prepare the report and discussion with the supervisor- Draft 3	1
12	Self-Study to prepare the report and discussion with the supervisor- Draft 4	1
13	Finalizing the report	1
14	Submitting the report	1
15	-	

Language Syllabus

Turkish I

EUROPEAN UNIVERSITY OF LEFKE								
MED100 - TURKISH								
SYLLABUS								
Course Code	Course Name	Course Type	Weekly Course Hours			Credits	ECTS	Weekly Time Schedule
			T	A	L			
MED100	TURKISH		2	0	0	2	2	
Prerequisite		Prerequisite to						
Course Lecturer	Assoc. Prof. Dr. Osman ERCİYAS				Office Hours Schedule	Wednesday 15:00 -16: 00		
E-mail	oerciyas@eul.edu.tr							
Phone	2676				Office / Room No	AS240		
Teaching Assistant(s)	-				Phone			
E-mail	-				Office / Room No			
Catalogue Descriptions	Turkish pronunciation, vowel harmony, Turkish sentence structure, frequently used words in Turkish, types of dialogue, English-Turkish translation studies, Turkish text reading exercises.							
Course Objectives	To provide students of the Faculty of Medicine whose native language is not Turkish with basic Turkish skills that they can use in their professional lives.							
Learning Outcomes	1. Comprehends the basic phonetic and structural features of Turkish 2. Applies the pronunciation features of Turkish 3. Acquires the basic vocabulary of Turkish 4. Develops Turkish text reading skills 5. Can use Turkish dialogues that are frequently used in daily life.							
Textbooks and/or References	1	Yunus Emre Enstitüsü / A1 düzeyi Türkçe kitapları						
	2	Kurtuluş Öztopçu. Elementary Turkish. İstanbul, 2006.						
	3	COM106 Turkish lecture notes/slides						
	4	Doğan Günay, Özdan Fidan ve diğerleri, Yabancılar İçin Türkçe Ders Kitabı + Alıştırma Kitabı, Papatya Yay., Ankara: 2013.						
WEEK	Date	TOPICS					Reference No - Section	
Week 1		Turkish alphabet, translation exercises examples, Turkish sounds						
Week 2		Turkish sentence structure, translation exercises, vocabulary examples						

Week 3		Frequently used expressions, daily language sentences 1, translation exercises				
Week 4		Days, colours, numbers, months, seasons, adjectives, Frequently used verbs 1				
Week 5		Turkish alphabet and its pronunciation, this/that (bu/şu/o)				
Week 6		Plural suffix (-lar/-ler), interrogative particle				
Week 7		How many, how much (kaç?), ordinal numbers (kaçıncı?), Frequently used verbs 2				
Week 8		Revision, translation exercises, vocabulary examples, there is/isn't (var/yok)				
Week 9		There is/isn't (var/yok) cont., opposite adjectives, translation exercises, vocabulary				
Week 10		Medical terms and exercises				
Week 11		Medical terms and exercises				
Week 12		Medical terms and exercises				
Week 13		Medical terms and exercises				
Week 14		Medical terms and exercises				
Evaluation Tools	Evaluation Tool	Quantity	Date	Weight in Total (%)	Weight in Semester Evaluation (%)	
	Final Exam	1		50		
	Semester Evaluation			100		
	Midterm(s)	1		50		
	Quiz(zes)					
	Project(s)					
	Homework(s)					
	Laboratory					
Other						
*** Lifelong Learning Programme (LLP) ***				Language of Instruction:		
Evaluation Tool	Quantity	Student Workload Hours		Evaluation Tool	Quantity	Student Workload Hours
Theoretical Hours	14	28.0		Applied Hours		
Midterm	1	1.0		Final	1	1.0
Midterm Study	2	6.0		Final Study	2	6.0
Laboratory				Homework		
Atelier				Seminar		
Field Study				Presentation		
Other				Self Study	7	21.0
TOTAL :					63	2.0

MED201 Musculoskeletal System and Disease

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Anatomy	10	15
Biochemistry	0	13
Clinical Approaches	0	30
Clinical Evaluation		5
Infectious Diseases		3
Internal Medicine		3
Nuclear Medicine		1
Orthopedics		5
Panel		2
Pediatric		3
Physiotherapy		7
Radiology		1
Histology & Embryology	0	4
Microbiology	4	15
Pathology	6	9
Pharmacology	0	6
Physiology	0	8
Practical Skills in Medicine	10	0
Total	30*	100**

Midterm Results: Overall 50%

Individual assessment weights

*Practical grade: 30%

The percentage of each module's practical evaluation is shown in the table above.

- **Anatomy and Pathology:**

The evaluation of the practical will be done during the practical sessions through

- 5) formative evaluations (quizzes, oral exams, assignments, etc.).
- 6) practical exam at the end of the committee.

- **Practical Skills in Medicine and Microbiology:**

The evaluation of the practical will be done during the practical sessions through

- 3) formative evaluations (quizzes, oral exams, assignments, etc.).

**Committee Theoretical Exam: 70%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

****Committee Theoretical Exam: 100%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Anatomy

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Anatomy	MED201	2024-2025	FALL	10+5	-

Course Language
English

Course Lecturer Details	
Name & Surname	Musa Muhtaroglu
E-mail	mmuhtaroglu@eul.edu.tr
Office Hours Schedule	Wednesday, 11:00 AM - 2:00 PM
Phone	05428540684
Office/Room No	+90 392 660 2000/

Course Objectives

Reading List	
No	Textbooks and/or References
1	Drake, R. L., Vogl, A. W., Mitchell, A. W. M. (2023). Gray's Anatomy for Students (5th ed.). Elsevier.
2	Netter, F. H. (2022). Netter Atlas of Human Anatomy: Classic Regional Approach (8th ed.). Elsevier.
3	Paulsen, F., Waschke J. (2023). Sobotta Atlas of Anatomy: English/Latin: General Anatomy and Musculoskeletal System; Internal Organs; Head, Neck and Neuroanatomy (17th ed.). Urban & Fischer.
4	Schünke, M., Schulte, E., Schumacher, U. (2020). Atlas of Anatomy, Three Volume Set (3rd ed.). Thieme.
5	Standring, S. (2020). Gray's Anatomy: The Anatomical Basis of Clinical Practice (42nd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	General Joint Information	1,4
1	Upper Limb Joints	1,2,3
2	Lower Limb Joints	2,3,5
2	Muscles and Fasciae: General Information	1,2,3
3	Peripheral Nervous System (1/2)	1,4
3	Peripheral Nervous System (2/2)	1,3,5
4	Head and Neck Muscles	1,2,3,4
5	Upper Limb Muscles	3,5
5	Lower Limb Muscles	1,2,3
6	Back and Chest Muscles	1,2,3,4,5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
2	Joints I	1,2,3
3	Joints II	1,2,3
4	Peripheral Nervous System and Head-Neck Muscles	1,2,3,4
5	Muscles of the Extremities	1,2,3,5
6	Muscles of the Back, Chest, and Abdomen	1,2,3

Biochemistry

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biochemistry	MED201	2024-2025	FALL	10+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst Prof Dr Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To learn about pentose phosphate pathway and its importance within the body. To become familiar with hexose metabolism pathways other than glucose metabolism. To become familiar with the principles of clinical enzymology and how enzymes can be used in the clinic to diagnose and monitor diseases. To become familiar with the concepts of biochemistry of various tissues and organs such as muscle and bone. To become familiar with concepts of oxidative stress and how antioxidants help relieve the oxidative stress within the body.

Reading List	
No	Textbooks and/or References
1	Essentials of Medical Biochemistry – Eun Ha, C. & Bhagavan, N. V. – Third Edition
2	Medical Biochemistry - Antonio Blanco & Gustavo Blanco - Second Edition
3	Lecture notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Pentose phosphate pathway (1/2)	2, 3
1	Pentose phosphate pathway (2/2)	2, 3
2	Hexose metabolism pathways (1/2)	2, 3
2	Hexose metabolism pathways (2/2)	2, 3
3	Clinical enzymology (1/2)	2, 3
3	Clinical enzymology (2/2)	2, 3
4	Biochemistry of muscle and bone (1/2)	1, 3

4	Biochemistry of muscle and bone (2/2)	1, 3
5	Oxidative stress and antioxidants (1/2)	2, 3
5	Oxidative stress and antioxidants (2/2)	2, 3

Clinical Approaches

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Clinical Evaluation	MED201	2024-2025	Fall	4+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Salahi Ataç Dr. Barış Sarı
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Firestein & Kelley's Textbook of Rheumatology, Gary S. Firestein MD, Iain B McInnes PhD FRCP FRSE FMedSci, 2024
2	Rheumatology, Marc C. Hochberg MD MPH MACP, Ellen M Gravallese MD, 2022
3	Orthopedic Traumatology: An Evidence-Based Approach, Manish K. Sethi, William T. Obremskey, 2018
4	Harrison's Principles of Internal Medicine, Twenty-First Edition, Joseph Loscalzo, Anthony S. Fauci, 2022

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Rheumatoid Arthritis (1/2) (Dr. Salahi Ataç)	1,2,3,4
5	Rheumatoid Arthritis (2/2) (Dr. Salahi Ataç)	1,2,3,4
6	Carpal Tunnel Syndrome (1/2) (Dr. Barış Sarı)	1,2,3,4
6	Carpal Tunnel Syndrome (2/2) (Dr. Barış Sarı)	1,2,3,4

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Infectious Diseases	MED201	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Nesil Bayraktar
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Levinson's Review of Medical Microbiology and Immunology: A Guide to Clinical Infectious Disease, Eighteenth Edition, Peter Chin-Hong, Elizabeth A. Joyce, 2024
2	Practical Clinical Microbiology and Infectious Diseases: A Hands-On Guide Firza Alexander Gronthoud,2020
3	Infectious Diseases: Smart Study Guide for Medical Students, Residents, and Clinical Providers (Developments in Microbiology), Saif ul Islam, 2023

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
6	Bone Infection	1,2,3
6	Septic Arthritis	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Internal Medicine	MED201	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Salahi Ataç
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Harrison's Principles of Internal Medicine, Twenty-First Edition (Vol.1 & Vol.2), Joseph Loscalzo , Anthony S. Fauci , 2022
2	Clinical Practice in Rheumatology Maurice Barry and Michael Doherty, 2011
3	Rheumatology Handbook, The, Margaret Callan, 2011

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Rheumatological Diseases (1/2)	1,2,3
5	Rheumatological Diseases (2/2)	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Nuclear Medicine	MED201	2024-2025	Fall	1+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Süha Akpınar
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Nuclear Medicine Technology: Procedures and Quick Reference by Pete Shackett BA CNMT ARRT(N) Oct 29, 2019
2	Essentials of Nuclear Medicine and Molecular Imaging: Expert Consult, Fred A. Mettler MD MPH and Milton J. Guiberteau MD FACR FACNM,, 2018
3	Nuclear Medicine and Molecular Imaging, David Gilmore EdD CNMT RT(R)(N) FSNMMI-TS and Kristen M. Waterstram-Rich MS CNMT NCT FSNMTS, 2022
4	Diagnostic Imaging: Nuclear Medicine Part of: Diagnostic Imaging, by Paige Bennett MD, 2020

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Bone Scintigraphy and Bone Densitometry	1,2,3,4

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Orthopedics	MED201	2024-2025	Fall	4+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Barış Sarı
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Orthopedic Traumatology: An Evidence-Based Approach by Manish K. Sethi, William T. Obrebsky, et al. May 2, 2018
2	Operative Approaches in Orthopedic Surgery and Traumatology, Fridun Kerschbaumer, Kuno Weise, 2015
3	Natarajan's Textbook of Orthopaedics & Traumatology, 8ed, Prof. M. V. Natrajan, 2018

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Locomotor System Biomechanics	1,2,3
4	Orthopedic Joint Diseases	1,2,3
5	Fractures and Dislocations	1,2,3
5	Nerve Compression Syndromes	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Panel	MED201	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Salahi Ataç Asst. Prof. Dr. Semra Aslay
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Simon's Emergency Orthopedics 8E (PB), Scott C. Sherman, 2023
2	Orthopedic Traumatology: An Evidence-Based Approach, Manish K. Sethi, William T. Obremskey, 2018
3	Roberts and Hedges' Clinical Procedures in Emergency Medicine and Acute Care, James R. Roberts MD FACEP FAAEM FACMT, 2018

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
7	Crush Injuries (Asst. Prof. Dr. Semra Aslay)	1,2,3
7	Crush Injuries (Dr. Salahi Ataç)	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Pediatric	MED201	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hakan Tekğüç
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Nelson Textbook of Pediatrics, Robert Kliegman MD and Joseph W. St. Geme III MD, 2024
2	Nelson Essentials of Pediatrics, Karen Marcdante MD, Robert Kliegman MD, 2022
3	Zitelli and Davis' Atlas of Pediatric Physical Diagnosis Sara C. McIntire MD, Andrew J Nowalk MD PhD, 2021

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
6	Juvenile Idiopathic Arthritis	1,2,3
6	Child Musculoskeletal System	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Physiotherapy	MED201	2024-2025	Fall	5+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Birol Balaban
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Physical Medicine and Rehabilitation Board Review, Fourth Edition, Sara J Cuccurullo MD, 2019
2	Braddom's Physical Medicine and Rehabilitation Part of: Physical Medicine and Rehabilitation, David X. Cifu MD, 2020
3	DeLisa's Physical Medicine and Rehabilitation: Principles and Practice, Prof. Walter R. Frontera MD PhD FAAPM&R FACSM , Joel A. DeLisa MD MS, 2019

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
6	Musculoskeletal System Symptoms	1,2,3
6	Musculoskeletal System Evaluation (1/2)	1,2,3
6	Musculoskeletal System Evaluation (2/2)	1,2,3
6	Musculoskeletal System Rehabilitation (1/2)	1,2,3
6	Musculoskeletal System Rehabilitation (2/2)	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Radiology	MED201	2024-2025	Fall	1+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Süha Akpınar
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Comprehensive Textbook of Clinical Radiology, Amarnath and Hemant Patel Jul 24, 2023
2	Brant & Helms' Fundamentals of Diagnostic Radiology, Jeffrey Klein MD FACR and Vincent Mellnick, Sep 24, 2024

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Radiology of the Musculoskeletal System	1,2

Histology / Embryology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Histology/Embryology	MED201	2024-2025	Fall	3+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rasime Kalkan
E-mail	rkalkan@eul.edu.tr
Office Hours Schedule	Tuesday 9:00-12:00
Phone	
Office/Room No	CL106

Course Objectives
The objective of this course is to introduce students to the fundamental developmental processes in vertebrate locomotor system embryology and to provide them with the ability to correlate the clinical presentation of errors in developmental procedures. The learning outcomes of this course are: 1) to describe the anatomy of the upper and lower limbs. 2) to describe the development of bone, 3) to describe the development of joints, 4) to describe the development of the axial skeletal system, 4) to describe the development of the appendicular skeleton, and 4) to describe the locomotor system disorders.

Reading List	
No	Textbooks and/or References
1)	Girssh, E.,2021, A Textbook of Clinical Embryology
2)	Cochard, L., R.,2012, Netter's Atlas of Human Embryology
3)	Gary C. Schoenwolf et al., 2021, Larsen's Human Embryology
4)	Torchia,M.G., Persaud, T. V. N. , 2020, Concise Clinical Embryology: an Integrated, Case-Based Approach

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	Development of Locomotor System (1/3)	1,2,3,4

2	Development of Locomotor System (2/3)	1,2,3,4
2	Development of Locomotor System (3/3)	1,2,3,4

Microbiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Microbiology	MED201	2024-2025	FALL	12+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Assist. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	
Phone	2735
Office/Room No	ECZ015

Course Objectives
The aim of this course is to understand the pathogenic microorganisms that cause infection in the musculoskeletal system (MSS). In addition, it was aimed to learn the characteristic features, pathogenesis, epidemiology, diagnosis and treatment of MSS infectious diseases. This course also included the development of students' case management, supported by case evaluations.

Reading List	
No	Textbooks and/or References
1	Jawetz Melnick & Adelbergs, Medical Microbiology 26/E (Lange Medical Books) 26th Edition
2	Frederick S. Southwick, Infectious Diseases: A Clinical Short Course, 4th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	<i>Staphylococci-1</i>	1, 2
1	<i>Staphylococci-2</i>	1, 2
2	<i>Streptococci</i>	1, 2
2	<i>Enterococci</i>	1, 2
3	Anaerobic Bacteria-1	1, 2
3	Anaerobic Bacteria-2	1, 2
4	Brucellosis	1, 2
4	<i>Rickettsia</i>	1, 2

5	<i>Clostridium</i> spp.	1, 2
5	Antibiotics: Mechanism of Action and Resistance	1, 2

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
6	Antibiotic Susceptibility Testing (AST)	1, 2
7	Bacterial Growth (Media and Culture)	1, 2

Pathology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pathology	MED201	2024-2025	FALL	7+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Lema Tavli
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	CL-105

Course Objectives
Providing knowledge and skills in bone, cartilage, and soft tissue pathologies and approach to the case"

Reading List	
No	Textbooks and/or References
1	"Surgical Pathology of Bone and Soft Tissue" - Akkerman, J. L.
2	"Robbins and Cotran Pathologic Basis of Disease" - Kumar, V., Abbas, A. K., Aster, J. C.
3	"Bone and Soft Tissue Pathology" - Enzinger, F. M., Weiss, S. W.
4	"Orthopedic Pathology" - A. C. Scully
5	"Bone Tumors: Diagnosis, Treatment, and Prognosis" -

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Congenital Diseases of Bone and Cartilage	1,2,4
2	Acquired Diseases of Bone and Cartilage	1,2,3,4,
3	Bone and Joint Infections	1,2,3,4,
4	Bone Tumors and Tumor-like Lesions (1/2)	2,5,
5	Bone Tumors and Tumor-like Lesions (2/2)	2,5
6	Joint Disease	1,2,3,
7	Soft Tissue Tumors	1,2,3,

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Bone Tumors and Tumors-Like Lesions	2,5
2	Joint Diseases and Soft Tissue Tumours	1,2,3

Pharmacology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pharmacology	MED201	2024-2025	FALL	5+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof Dr Rumeysa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	2802
Office/Room No	

Course Objectives
Neuromuscular blocking drugs (NMBDs) are used in anaesthesia to impair neuromuscular transmission and provide skeletal muscle relaxation. These drugs enable the anaesthetist to perform tracheal intubation, facilitate ventilation and to provide optimal surgical operating conditions, for example during laparotomy. NMBDs are quaternary ammonium compounds structurally similar to acetylcholine (ACh); they act mostly at the post junctional nicotinic receptor of the neuromuscular junction. NMBDs may be agonists (“depolarising” NMBDs) or antagonists (“non-depolarizing” NMBDs) at the nicotinic receptor.

Reading List	
No	Textbooks and/or References
1	Rang & Dale’s Pharmacology., 10th Ed, 2023, Elsevier Health Sci
2	Bertram Katzung 14th Ed., Basic & Clinical Pharmacology, McGrawHill
3	L, Brunten, et al., Goodman & Gillman Pharmacological Basis of Therapeutics 14th Ed., McGrawHill
4	Joseph DiPiro, et al., 11th Ed, Pharmacotherapy: A Pathophysiological Approach McGrawHill
5	M J Neal., Medical Pharmacology at a Glance 9th Ed, Wiley

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Drugs that effect neuromuscular transmission	3

2	Muscle Relaxants and Spasmolytics	3-4
2	Muscle Relaxants and Spasmolytics	3-4
3	NSAID's	1-5
3	NSAID's	1-5

Physiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Physiology	MED201	2024-2025	FALL	6+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Nazemin Gürsoy Karaman
E-mail	gursoynazemin@yahoo.com
Office Hours Schedule	
Phone	05428611721
Office/Room No	

Course Objectives
<p>This course aims to provide students with a thorough understanding of the physiology of the musculoskeletal system, focusing on the structure and function of skeletal muscle, bones, and joints. The course will explore the molecular and cellular mechanisms of muscle contraction, excitation-contraction coupling, and energy metabolism, as well as the principles of bone remodeling and joint biomechanics. Students will learn to integrate these concepts to understand movement, posture, and the body's response to mechanical stress and injury. Additionally, the course will emphasize the clinical relevance of musculoskeletal physiology, including common disorders such as osteoporosis, muscle fatigue, and sarcopenia, to foster critical thinking and a problem-solving approach in medical practice.</p>

Reading List	
No	Textbooks and/or References
1	Guyton and Hall Human Physiology
2	Willian Ganong Review of Medical Physiology
3	Susan E. Mulroney- Adam K. Meyers Netters Essential Physiology
4	Vander Human Physiology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Introduction of skeletal muscle physiology	1-4
3	Molecular mechanism of contraction	1-4
3	Neuromuscular junction	1-4
4	Contraction types of skeletal muscle	1-4
4	Skeletal muscle types	1-4
4	Bone physiology	1-4

Professional Skills Practices

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Professional Skills Practices	MED201	2024-2025	FALL	0+6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Semra Aslay
E-mail	saslay@eul.edu.tr
Office Hours Schedule	Tuesday, 09:00-12:00
Phone	2728
Office/Room No	CL104

Course Objectives
Definition of simple disease, basic approaches to throat infections, Basic approaches to patient speaks Turkish

Reading List	
No	Textbooks and/or References
1	The Patient History: Evidence-Based Approach (Tierney, The Patient History) 2nd Edition by Mark Henderson (Author), Lawrence M. Tierney (Author), Gerald W. Smetana (Author), Mc Graw Hill/Medical, US,2012
2	Clinical Approach to the Patient First Edition by William L. Morgan (Author), WB Saunders Co Publishing, 1969, US

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Definition of simple disease	1,2
1	Definition of simple disease	1,2
2	Basic approaches to throat infections	1,2
2	Basic approaches to throat infections	1,2
3	Basic approaches to patient speaks Turkish	1,2
3	Basic approaches to patient speaks Turkish	1,2

MED203 Nervous System and Diseases

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Anatomy	10	15
Behavioral & Social Skills	0	3
Clinical Approaches	0	28
Clinical Evaluation		4
Infectious Diseases		3
Neurology		10
Neurosurgery		2
Nuclear Medicine		1
Ophthalmology		1
Otorhinolaryngology		1
Panel		1
Psychiatry		3
Radiology		2
Histology/Embryology	4	8
Microbiology	2	8
Pathology	0	7
Pharmacology	0	11
Physiology	4	20
Professional Skills Practices	10	0
Total	30*	100**

Midterm Results: Overall 50%

Individual assessment weights

***Practical grade: 30%**

The percentage of each module's practical evaluation is shown in the table above.

- **Anatomy and Histology/Embryology:**

The evaluation of the practical will be done during the practical sessions through

- 7) formative evaluations (quizzes, oral exams, assignments, etc.).
- 8) practical exam at the end of the committee.

- **Microbiology, Physiology & Professional Skills Practices:**

The evaluation of the practical will be done during the practical sessions through

- 4) formative evaluations (quizzes, oral exams, assignments, etc.).

****Committee Theoretical Exam: 70%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

****Committee Theoretical Exam: 100%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Anatomy

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Anatomy	MED203	2024-2025	FALL	23+14	-

Course Language
English

Course Lecturer Details	
Name & Surname	Musa Muhtaroglu
E-mail	mmuhtaroglu@eul.edu.tr
Office Hours Schedule	Wednesday, 11:00 AM - 2:00 PM
Phone	05428540684
Office/Room No	+90 392 660 2000/

Course Objectives

Reading List	
No	Textbooks and/or References
1	Drake, R. L., Vogl, A. W., Mitchell, A. W. M. (2023). Gray's Anatomy for Students (5th ed.). Elsevier.
2	Netter, F. H. (2022). Netter Atlas of Human Anatomy: Classic Regional Approach (8th ed.). Elsevier.
3	Paulsen, F., Waschke J. (2023). Sobotta Atlas of Anatomy: English/Latin: General Anatomy and Musculoskeletal System; Internal Organs; Head, Neck and Neuroanatomy (17th ed.). Urban & Fischer.
4	Schünke, M., Schulte, E., Schumacher, U. (2020). Atlas of Anatomy, Three Volume Set (3rd ed.). Thieme.
5	Standring, S. (2020). Gray's Anatomy: The Anatomical Basis of Clinical Practice (42nd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Neuroanatomy: General Organization and Terminology	3
1	Forebrain (Prosencephalon) and Cortical Structures	1,2,3
1	Subcortical Structures (1/2): White Matter	1,2,4
1	Subcortical Structures (2/2): Grey Matter	
1	Diencephalon (Interbrain)	1,2,3,4
2	Mesencephalon (Midbrain)	1,2,3
2	Pons and Medulla Oblongata	1,2,3,4,5
2	Cerebellum	1,2,3
2	Meninges of the Central Nervous System	1,2,3,4,5
3	Blood Supply of the Central Nervous System	3
3	Ventricular System and Cerebrospinal Fluid	3,4
3	Spinal Cord Morphology	1,3,4
3	Cranial Nerves (1/3)	1,3,4
4	Cranial Nerves (2/3)	1,3,4
4	Cranial Nerves (3/3)	1,3,4
4	Spinal Nerves (1/2)	1,3,4,5
4	Spinal Nerves (2/2)	1,3,4,5
6	Autonomic Nervous System (1/2)	1,3,4,5
6	Autonomic Nervous System (2/2)	1,3,4
6	Sensory Organs (1/2)	1,4,5
7	Sensory Organs (1/2)	1,4,5
7	Sensory Organs(2/2)	1,4,5
7	Sensory Organs(2/2)	1,4,5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Telencephalon I	3,4
2	Telencephalon II	3,4
3	Diencephalon, Brainstem, and Cerebellum	2,3,4
4	Spinal Cord	2,3,4
6	Cranial Nerves	2,3,4
7	Spinal Nerves/ Sensory Organs	2,3,4

Behavioral & Social Skills

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Behavioral & Social Skills	MED203	2024-2025	Fall	5+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Doğa Eroğlu Şah
E-mail	dsah@eul.edu.tr
Office Hours Schedule	Thursday 10.00 – 11.00
Phone	3585
Office/Room No	ECZ021

Course Objectives
This course aims to equip medical students with key behavioral and social skills. It focuses on stress, coping with stress, psychological well-being and social well-being.

Reading List	
No	Textbooks and/or References
1	Hinote, B. P. & Wasserman, J. A. (2019). <i>Social and Behavioral Science for Health Professionals</i> . Rowman & Littlefield.
2	Lecture Notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Social well-being	1,2
2	Psychological well-being	1,2
2	Psychological well-being	1,2
3	Stress and coping	1,2
3	Stress and coping	1,2

Clinical Approaches

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Clinical Evaluation	MED203	2024-2025	Fall	6+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Resul Karadeniz Asst. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	
Phone	2735
Office/Room No	ECZ015

Course Objectives
Emrah Güler: To teach case management and differential diagnosis. In addition, this course aims to examine central nervous system infections with case studies.

Reading List	
No	Textbooks and/or References
1	Adams and Victor's Principles of Neurology, Twelfth Edition, Allan H. Ropper , Martin A. Samuels, 2023
2	Bradley and Daroff's Neurology in Clinical Practice, (Bradley's Neurology in Clinical Practice) Joseph Jankovic MD , John C Mazziotta MD PhD, 2021
3	Greenberg's Handbook of Neurosurgery, Mark S. Greenberg , 2023
4	Jawetz Melnick & Adelbergs, Medical Microbiology 26/E (Lange Medical Books) 26 th Edition
5	Frederick S. Southwick, Infectious Diseases: A Clinical Short Course, 4 th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Subarachnoid Hemorrhage (1/2) (Dr. Resul Karadeniz)	1,2,3
3	Subarachnoid Hemorrhage (2/2) (Dr. Resul Karadeniz)	1,2,3

4	Meningitis (Asst. Prof. Dr. Emrah Güler)	4,5
5	Brainstem Lesions (1/2) (Dr. Resul Karadeniz)	1,2,3
5	Brainstem Lesions (2/2) (Dr. Resul Karadeniz)	1,2,3
6	Tetanus (Asst. Prof. Dr. Emrah Güler)	4,5

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Infectious Diseases	MED203	2024-2025	Fall	4+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	
Phone	2735
Office/Room No	ECZ015

Course Objectives
To examine CNS infections caused by infectious agents, students will be introduced to the definition of meningitis and encephalitis and will be taught the most common pathogenic microorganisms that cause these diseases. In addition, the pathogenesis, diagnosis and treatment of these diseases will be emphasized and important parameters in differential diagnosis will be explained.

Reading List	
No	Textbooks and/or References
1	Jawetz Melnick & Adelbergs, Medical Microbiology 26/E (Lange Medical Books) 26 th Edition
2	Frederick S. Southwick, Infectious Diseases: A Clinical Short Course, 4 th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Encephalitis and Brain Abscess	1,2
6	Rabies	1,2
7	Meningitis	1,2
7	Tetanus	1,2

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Neurology	MED203	2024-2025	Fall	16+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Ferda Selçuk
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
To train practitioners to accurately diagnose and manage disorders of the nervous system, with a core focus on localizing lesions and understanding the time course of diseases. Objectives focus on developing both procedural skills (history taking, exam techniques) and analytical skills (differential diagnosis, interpreting investigations)

Reading List	
No	Textbooks and/or References
1	Adams and Victor's Principles of Neurology, Twelfth Edition, Allan H. Ropper , Martin A. Samuels, 2023
2	Hankey's Clinical Neurology, Philip B. Gorelick, Fernando D. Testai,2020
3	Clinical Neurology and Neuroanatomy: A Localization-Based Approach, Second Edition by BERKOWITZ, 2022
4	Bradley and Daroff's Neurology in Clinical Practice, (Bradley's Neurology in Clinical Practice), Joseph Jankovic MD , John C Mazziotta MD PhD, 2021

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Clinical Perspective of the Nervous System	1,2,3,4
1	Localization in Neurology	1,2,3,4
1	Approach to the Patient in Neurology	1,2,3,4

1	Neurology of Balance and Vertigo	1,2,3,4
2	Basal Ganglia: Movement Disorders in Clinic	1,2,3,4
2	Clinical Findings in Cranial Nerve Disorders	1,2,3,4
2	Cerebrovascular Disorders	1,2,3,4
2	Spinal Cord: Anatomical Localization and Clinic Findings	1,2,3,4
4	Demyelinating Disorders	1,2,3,4
4	Coma and Delirium	1,2,3,4
4	Sleeplessness, Sleep, and Disorders	1,2,3,4
4	Cognition; Upper Cortical Functions, Neurological Approach to the Dementia	1,2,3,4
7	Clinical Findings in Neuromuscular Transmission and Muscle Diseases	1,2,3,4
7	Clinical Findings in the Peripheral Nerve Diseases	1,2,3,4
7	Headache	1,2,3,4
7	Epilepsy	1,2,3,4

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Neurosurgery	MED203	2024-2025	Fall	3+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Resul Karadeniz
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
Clinical approaches in neurosurgery focus on achieving maximum therapeutic benefit while ensuring patient safety, prioritizing minimal brain or spinal tissue retraction and damage. The primary objectives include accurate diagnosis, meticulous surgical execution, and the optimization of neurological function, often using personalized techniques such as minimally invasive surgery, awake craniotomies, and intraoperative monitoring.

Reading List	
No	Textbooks and/or References
1	Peripheral Nerve Surgery (Neurosurgery by Example), Part of: Neurosurgery by Example, Dr Thomas Wilson and Dr Lynda J-S Yang, 2018
2	Bridwell and DeWald's Textbook of Spinal Surgery, Keith H. Bridwell MD and Dr. Munish Gupta MD, 2019
3	Greenberg's Handbook of Neurosurgery, Mark S. Greenberg , 2023
4	Neurosurgery Fundamentals, Nitin Agarwal, 2018

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Neurosurgical Approach to the Neurological Symptoms	1,2,3,4
3	Increased Intracranial Pressure Syndrome (ICP)	1,2,3,4
3	Neurosurgery in Nervous System Tumors	1,2,3,4

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Nuclear Medicine	MED203	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hülya Efetürk
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
To improve patient care through personalized, non-invasive assessment of bodily functions—such as metabolism, perfusion, and receptor expression—that structural imaging (CT/MRI) cannot detect.

Reading List	
No	Textbooks and/or References
1	Essentials of Nuclear Medicine and Molecular Imaging: Expert Consult - Online and Print by Fred A. Mettler MD MPH and Milton J. Guiberteau MD FACR FACNM Nov 21, 2018
2	Nuclear Medicine: A Core Review, Chirayu Shah MD, Marques Bradshaw MD, 2021
3	Nuclear Medicine and Molecular Imaging, David Gilmore EdD CNMT RT(R)(N) FSNMMI-TS and Kristen M. Waterstram-Rich MS CNMT NCT FSNMTS, 2022

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
7	Nuclear Medicine in the Nervous System	1,2,3
7	Nuclear Medicine in the Nervous System	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Ophthalmology	MED203	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Zafer Hıdıroğlu
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
To ensure the preservation of sight, early detection of disease, and the application of evidence-based medical and surgical treatments. The core objectives focus on comprehensive patient care, ranging from routine examinations to managing complex ocular conditions and emergencies.

Reading List	
No	Textbooks and/or References
1	Ophthalmology, Myron Yanoff MD and Jay S. Duker MD, 2023
2	Kanski's Clinical Ophthalmology: A Systematic Approach, John F. Salmon MD FRCS FRCOphth, 2024
3	Ophthalmology, Myron Yanoff MD and Jay S. Duker MD, 2018

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Optic Nerve Diseases	1,2,3
5	Anisocoria	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Otorhinolaryngology	MED203	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Akin Karamahmutoğlu
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
To provide safe, evidence-based, and patient-centered care for disorders of the ear, nose, throat, head, and neck. The core objectives focus on integrating diagnostic precision, surgical proficiency, and rehabilitation to improve patient quality of life, alongside fostering interdisciplinary collaboration and utilizing advanced technology.

Reading List	
No	Textbooks and/or References
1	Bailey's Head and Neck Surgery: Otolaryngology (Head & Neck Surgery-Otolaryngology), Clark A. Rosen MD FACS, 2022
2	Cummings Otolaryngology: Head and Neck Surgery, Paul W. Flint MD , Bruce H. Haughey MD FACS, 2020
3	KJ Lee's Essential Otolaryngology, 12th edition, Yvonne Chan and John C. Goddard, 2019

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Approach to the Patient with Vertigo	1,2,3
5	Approach to the Patient with Tinnitus	1,2,3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Panel	MED203	2024-2025	Fall	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Resul Karadeniz
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives

Reading List	
No	Textbooks and/or References
1	Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 9th Edition by Judith E. Tintinalli , O. John Ma, 2019
2	KJ Lee's Essential Otolaryngology, 12th edition, Yvonne Chan and John C. Goddard, 2019
3	Lippincott Illustrated Reviews: Pharmacology (Lippincott Illustrated Reviews Series) Part of: Lippincott Illustrated review,Karen Whalen PharmD BCPS, 2022
4	Adams and Victor's Principles of Neurology, Twelfth Edition, Allan H. Ropper , Martin A. Samuels, 2023
5	Kaplan & Sadock's Synopsis of Psychiatry, Robert Boland , Marcia Verduin , 2021

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Headache	1,2,3,4,5
5	Headache	1,2,3,4,5

COURSE DESCRIPTION					
COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Psychiatry	MED203	2024-2025	FALL	5+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Zihniye Okray
E-mail	zokray@eul.edu.tr
Office Hours Schedule	Thursday 14:00
Phone	2722
Office/Room No	ECZ012

Course Objectives
At the end of this course: Students have information about mental state examination Students have information about different mental disorders and their diagnosis.

Reading List	
No	Textbooks and/or References
1	Handouts
2	American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	First Interview with the Psychiatric Patient and Mental State Examination	1
5	Schizophrenia and Related Disorders	1-2
5	Bipolar and Major Depressive Disorders	1-2
7	Anxiety and OCD Disorders	1-2
7	Dementia	1-2

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credits
Radiology	MED203	2024-2025	Fall	3+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Süha Akpınar
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
To integrate advanced imaging technology with patient-centered care to achieve accurate, timely diagnoses and effective treatment interventions. The primary objectives focus on improving patient outcomes through evidence-based practice, multidisciplinary collaboration, and continuous quality improvement.

Reading List	
No	Textbooks and/or References
1	Learning Radiology: Recognizing the Basics, William Herring MD FACR, 2023
2	Comprehensive Textbook of Clinical Radiology, C Amarnath and Hemant Patel, 2023
3	Brant & Helms' Fundamentals of Diagnostic Radiology, Jeffrey Klein MD FACR and Vincent Mellnick, 2024

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Radiology of Nervous System (1/3)	1,2,3
6	Radiology of Nervous System (2/3)	1,2,3
7	Radiology of Nervous System (3/3)	1,2,3

Histology / Embryology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Histology/Embryology	MED203	2024-2025	Fall	12+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Ass.t Prof. Dr. Ayfer Findik
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
Focus on correlating the microscopic structure of nervous tissue with its function, understanding its development, and identifying developmental or pathological deviations.

Reading List	
No	Textbooks and/or References
1	Girssh, E.,2021, A Textbook of Clinical Embryology
2	Cochard, L., R.,2012, Netter's Atlas of Human Embryology
3	Gary C. Schoenwolf et al., 2021, Larsen's Human Embryology
4	Torchia,M.G., Persaud, T. V. N. , 2020, Concise Clinical Embryology: an Integrated, Case-Based Approach

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	Nervous System Development (1/2)	1,2,3,4
2	Nervous System Development (2/2)	1,2,3,4
2	Brain and Spinal Cord Histology	1,2,3,4
2	Cerebellum and Meninges Histology	1,2,3,4
2	Skin Development and Histology (1/3)	1,2,3,4
2	Skin Development and Histology (2/3)	1,2,3,4

2	Skin Development and Histology (3/3)	1,2,3,4
2	Ear Development and Histology (1/2)	1,2,3,4
6	Ear Development and Histology (2/2)	1,2,3,4
6	Eye Development and Histology (1/3)	1,2,3,4
6	Eye Development and Histology (2/3)	1,2,3,4
6	Eye Development and Histology (3/3)	1,2,3,4
PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
2	Nervous System Histology	1,2,3,4
6	Skin, Eye, Ear Histology	1,2,3,4

Microbiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Microbiology	MED203	2024-2025	FALL	12+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Assist. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	
Phone	2735
Office/Room No	ECZ015

Course Objectives
The aim of this course is to understand the pathogenic microorganisms that cause infection in the central nervous system (CNS). In addition, it was aimed to learn the characteristic features, pathogenesis, epidemiology, diagnosis and treatment of CNS infectious diseases. This course also included the development of students' case management, supported by case evaluations.

Reading List	
No	Textbooks and/or References
1	Jawetz Melnick & Adelbergs, Medical Microbiology 26/E (Lange Medical Books) 26th Edition
2	Frederick S. Southwick, Infectious Diseases: A Clinical Short Course, 4th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Menengitis	1, 2
1	<i>Streptococcus pneumonia</i>	1, 2
2	<i>Haemophilus influenza</i>	1, 2
2	<i>Neisseria meningitidis</i>	1, 2
3	<i>Listeria monocytogenes</i>	1, 2
3	Diagnosis of Viruses	1, 2
4	<i>Rhapdoviridae</i> (Rabies virus)	1, 2
4	Picornaviruses and Arboviruses	1, 2
5	Neurotropic viruses and Ebola virus	1, 2

5	Freeliving amoeba: Naegleria and Acanthamoeba	1, 2
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PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
6	Virus Isolation and Culture	1, 2
7	Examining of CSF	1, 2

Pathology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pathology	MED203	2024-2025	FALL	10+2	-

Course Language
English

Course Lecturer Details	
Name & Surname	Lema Tavlı
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	CL-105

Course Objectives
NERVOUS SYSTEM AND ITS DISEASES

Reading List	
No	Textbooks and/or References
1	Robbins and Cotran Pathologic Basis of Disease" - Kumar, V., Abbas, A. K., Aster, J. C.
2	Surgical Pathology of the Nervous System and Its Coverings" - Akkerman, J. L.
3	Neuroanatomy through Clinical Cases" - Hal Blumenfeld
4	Neuropathology: A Reference Text of CNS Pathology" - David N. Louis, Robert B. D.
5	Basic Pathology: A Textbook of Disease" - Vinay Kumar, Abul Abbas, Jon Aster

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Edema, Hydrocephalus, Herniation	1,2,3,5
1	Congenital malformations	1,2,3
2	CNS traumas	1,2,3
2	Cerebrovascular Diseases	1,2,3
3	Central Nervous System Infections	1,2,3,4
3	Primary Myelin Disorders	1,2,3,4
4	Neurodegenerative Diseases	1,2,3,4,5
4	Acquired Metabolic and Toxic Diseases	1,2,3,4,5
5	Nervous System Tumors (1/2)	1,2,3,4,5

5	Nervous System Tumors (2/2)	1,2,3,4,5
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PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
7	Nervous System Tumors	1,2,3,4,5

Pharmacology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pharmacology	MED203	2024-2025	FALL	17+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof Dr. Rumeysa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	2802
Office/Room No	

Course Objectives
The course is to teach students the principles of cardiovascular pharmacology and therapeutics. We will focus on the underlying mechanistic bases of cardiovascular diseases and examine how these relate to therapeutic interventions. Throughout the course, mechanisms, either of disease processes or drug actions are stressed. In addition, recent developments in the understanding and treatment of cardiovascular disease will be discussed

Reading List	
No	Textbooks and/or References
1	Rang & Dale's Pharmacology., 10th Ed, 2023, Elsevier Health Sci
2	Bertram Katzung 14th Ed., Basic & Clinical Pharmacology, McGrawHill
3	L, Brunten, et al., Goodman & Gillman Pharmacological Basis of Therapeutics 14th Ed., McGrawHill
4	Joseph DiPiro, et al., 11th Ed, Pharmacotherapy: A Pathophysiological Approach McGrawHill
5	M J Neal., Medical Pharmacology at a Glance 9th Ed, Wiley

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to the CNS Pharmacology	2-4
1	Introduction to the CNS Pharmacology	2-4
2	General Anaesthetics	2-4
2	Pain, Inflammation and Mediators	2-4
2	Local Anaesthetics	2-4
3	Musculoskeletal Disorders, Parkinson's Disease, Alzheimer's Disease	1,2-4
3	Alcohol and Alcohol Intoxication	3-5
3	Sedatives and Hypnotics	3-5
3	Sedatives and Hypnotics	1,4
4	Substance Abuse and Dependence	5
4	Antidepressant and Antimanic Drugs	3,4
5	Antidepressant and Antimanic Drugs	3,4
5	Opioid Analgesics and Antagonists	1,2
5	Opioid Analgesics and Antagonists	1,2
5	CNS Stimulants	5
7	Neuroleptics and Antipsychotics	4,5
7	Antiepileptics	4,5

Physiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Physiology	MED203	2024-2025	FALL	31+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Nazemin Gürsoy Karaman
E-mail	gursoynazemin@yahoo.com
Office Hours Schedule	
Phone	05428611721
Office/Room No	

Course Objectives
<p>The primary objective of this course is to provide students with a comprehensive understanding of the structural and functional organization of the nervous system, including both central and peripheral components. The course will explore the cellular and molecular mechanisms underlying neuronal communication, such as synaptic transmission and action potential generation, while emphasizing the physiological roles of sensory and motor pathways. Students will gain insights into the integration of neurophysiological processes, including reflex arcs, higher brain functions, and autonomic nervous system regulation, and will relate these concepts to common clinical disorders by focusing on their pathophysiology. Additionally, the course aims to highlight the role of the nervous system in maintaining homeostasis and its interactions with other physiological systems. Through problem-based learning and clinical case discussions, students will develop critical thinking and problem-solving skills, fostering a lifelong learning mindset for further exploration in neurophysiology and related medical fields.</p>

Reading List	
No	Textbooks and/or References
1	Guyton and Hall Human Physiology
2	Willian Ganong Review of Medical Physiology
3	Susan E. Mulroney- Adam K. Meyers Netters Essential Physiology
4	Vander Human Physiology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction of nervous system	1-4
1	Nervous System, Synapses and Transmitters	1-4
1	Sensory Receptors and Neuronal Circuits	1-4
1	Somatic Sensations I	1-4
1	Somatic Sensations II (Pain and Temperature)	1-4
1	Chemical Senses I (Taste)	1-4
1	Chemical Senses I I(Smell)	1-4
2	Introduction of spinal cord physiology	1-4
2	Motor function of spinal cord	1-4
2	Reflex function of spinal cord	1-4
2	Ascending and descending pathways	1-4
2	Brainstem control of motor function	1-4
2	Reticular formation	1-4
2	Cerebellum	1-4
3	Basal ganglia	1-4
3	Pyramidal system	1-4
3	Extrapyramidal system	1-4
3	Motor and sensorial cortex of brain	1-4
3	Association areas of cortex	1-4
4	Hypothalamus	1-4
4	Thalamus	1-4
4	Learning and memory physiology	1-4
4	Limbic system	1-4
6	Autonomic nervous system(symphatics)	1-4
6	Autonomic nervous system(parasympomatics)	1-4
6	Cerebrospinal fluid and blood-brain barrier	1-4
6	EEG and sleep physiology	1-4
7	The sense of vision	1-4
7	The sense of hearing	1-4
7	Vestibular apparatus	1-4
7	Equilibrium and balance physiology	1-4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Reflexes	1-4
4	Recording and Analysis of Action Potentials in Nerve Fibers	1-4
6	Electromyography	1-4
7	Sensory Physiology: Investigation of Tactile and Thermal Sensory Threshold	1-4

Professional Skills Practices

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Professional Skills Practices	MED203	2024-2025	Fall	0+6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Semra Aslay
E-mail	saslay@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
Mastery of neuroanatomy, the ability to perform a comprehensive neurological examination, and the ability to distinguish between organic and psychological disorders

Reading List	
No	Textbooks and/or References
	Adams and Victor's Principles of Neurology (11th Edition):

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Positioning the Patient, Transporting the Patient, and Using a Cervical Collar	1
3	General Neurological Examining	1
4	Glasgow Coma Score Evaluation	1

Electives Syllabus

Diseases & Health

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Health And Disease	MED205	2024-2025	FALL	14+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Lema Tavli
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	05391062400
Office/Room No	CL-105

Exam Evaluation	
Midterm	50%
Final	50%

Course Objectives
<p>To understand the fundamental mechanisms of health and disease with a focus on pathology of the central nervous system, bone, and soft tissues.</p> <p>To develop students' ability to analyze, present, and discuss pathological processes through student-led presentations and interactive discussions.</p>

Reading List	
No	Textbooks and/or References
1	Kumar V, Abbas AK, Aster JC. <i>Robbins and Cotran Pathologic Basis of Disease</i> . 10th ed. Philadelphia: Elsevier; 2020.
2	Kumar V, Abbas AK, Aster JC. <i>Robbins Basic Pathology</i> . 10th ed. Philadelphia: Elsevier; 2018.
3	Rubin R, Strayer DS. <i>Rubin's Pathology: Clinicopathologic Foundations of Medicine</i> . 7th ed. Philadelphia: Wolters Kluwer; 2020.

4	Goldblum JR, Lamps LW, McKenney JK, Myers JL. <i>Sternberg's Diagnostic Surgical Pathology</i> . 6th ed. Philadelphia: Wolters Kluwer; 2022.
5	Young B, O'Dowd G, Woodford P. <i>Wheater's Functional Histology</i> . 6th ed. Philadelphia: Elsevier; 2013.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	The basic concepts of pathology and the scope of the course are presented and discussed with the participation of all students.	1,2,3,5
2	Cellular injury and mechanisms of cell death are prepared, presented, and discussed by a student.	1,2,3
3	Acute and chronic inflammation processes are prepared, presented, and discussed by a student.	1,2,3,4
4	Ischemia and infarction topics are presented and discussed.	1,2,3,4,5
5	Alzheimer's and Parkinson's diseases are prepared, presented by a student, and discussed.	1,2,3,4,5
6	Multiple sclerosis and related diseases are presented and discussed.	1,2,3,4,5
7	Brain tumors are presented with visual materials and discussed.	1,2,3,4,5
8	Bone development and diseases are presented and discussed by a student.	1,2,3,4,5
9	Osteoporosis and osteomalacia are presented with visual materials by a student and discussed.	1,2,3,4,5
10	A student presents a paper-based presentation on benign and malignant bone tumors, followed by discussion.	1,2,3,4,5
11	Rheumatoid arthritis and osteoarthritis are presented with visual materials by a student and discussed.	1,2,3,4,5
12	Presentations prepared from studies on benign and malignant soft tissue tumors are delivered and discussed.	1,2,3,4,5
13	Compiled presentations on inflammatory and genetic muscle diseases are delivered and discussed.	1,2,3,4,5
14	A question-answer session and discussion are conducted based on case-based topics	1,2,3,4,5

Research Project II

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Research Project II	MED209	2024-2025	Fall	28	2

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rümeyşa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	2802
Office/Room No	

Exam Evaluation	
Midterm Report	50%
Final Report: Poster Presentation	50%

Course Objectives
1) To teach how should be the format and how to make the layout of the report. 2) To highlight where the students can find the sources/references for the report. 3) To teach why the referencing/plagiarism is important in the report.

Reading List	
No	Textbooks and/or References
1	Papers related to the topics

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introducing the scientific report	1
2	Deciding the topic and title of the report	1
3	Scientific sources/papers	1
4	Referencing style for the report	1
5	How to write an abstract	1
6	How to write the main body	1

7	How to arrange/organize the report on the PowerPoint or Word	1
8	Midterm Exam	
9	Self-Study to prepare the report and discussion with the supervisor-Draft 1	1
10	Self-Study to prepare the report and discussion with the supervisor-Draft 2	1
11	Self-Study to prepare the report and discussion with the supervisor-Draft 3	1
12	Self-Study to prepare the report and discussion with the supervisor-Draft 4	1
13	Finalizing the report	1
14	Submitting the report	1
15	-	

Language Syllabus

Turkish III

COURSE TEACHING PLAN	
Course Name	TURKISH
Course Code	MED 200
Course Type	Compulsory
Course Level	Undergraduate
Course ECTS Credit	2
Weekly Course Hours	2
Weekly Practice Hours	0
Weekly Laboratory Hours	0
Year of the Course	2024-2025
Semester of the Course	FALL
Course Lecturer(s)	Naziyet Mercan Bozok
Teaching System	Formal Education
Medium of Instruction	English & Turkish
Prerequisite Courses	None
Other Aspects Recommended for the Course	None
Apprenticeship	None
Aim of the Course	The aim of the course is to enable students to understand, apply and evaluate the methods, techniques and principles used in teaching Turkish as a foreign language.
Learning Outcomes	1. Comprehends the basic phonetic and structural features of Turkish.
	2. Applies the pronunciation features of Turkish.
	3. Acquires the basic vocabulary of Turkish.
	4. Develops Turkish text reading skills.
	5. Can use Turkish dialogues that are frequently used in daily life.
Course Content	The methods used in teaching Turkish as a foreign language will be given theoretically and practically. Developing the four basic skills, planning teaching activities in advance, learning from simple to complex, from concrete to

	abstract, using visual and auditory tools, using the mother tongue when necessary, presenting one structure at a time, ensuring that the given information is transferred to daily life, ensuring that students participate in the lesson more effectively, taking individual differences into account, motivating and encouraging students.
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Weekly Detailed Course Content	week 1	Daily life: What time? How much? How many liras? Where? When?
	week 2	Basic concepts of transportation, Time and time zones
	week 3	Grammar: Definite past tense, adverbs of time, -ile, -yLA, -dAn before, dAn after
	week 4	General Turkish studies: Review of previous knowledge through text and dialogue studies.
	week 5	Reading and writing studies
	week 6	Studies and exercises on general medical terms
	week 7	Words and dialogues used in hospitals/clinics, Doctor-patient dialogue studies
	week 8	Mid-Term Exam
	week 9	Watching/commenting on Turkish videos about hospital, patient, doctor, examination
	week 10	General Turkish studies: Review of previous knowledge through text and dialogue studies.
	week 11	Listening, reading and writing exercises
	week 12	Turkish days, months, seasons
	week 13	Studies on recognizing the human body and learning the names of organs
	week 14	Sentence and text translation studies & Studies and exercises on general medical terms
	week 15	Final Exam

Course Book/Material/Suggested Resources	Yunus Emre Enstitüsü / A1 düzeyi Türkçe kitapları
	Kurtuluş Öztöpe. Elementary Turkish. İstanbul, 2006.
	COM106 Turkish lecture notes/slides
	Doğan Günay, Özdan Fidan ve diğerleri, Yabancılar İçin Türkçe Ders Kitabı + Alıştırma Kitabı, Papatya Yay., Ankara: 2013.
	Halitoğlu, V. (2024). A flipped-classroom model in teaching Turkish as a foreign language and student opinions regarding the lesson. International Online Journal of Educational Sciences, 12(1), 67-87.

European University of Lefke

Faculty of Medicine

2024-2025

SPRING

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Credits of the Courses

Code	Course	Credit
MED102	Cell and Tissue Systems Development	(7,2)8
MED104	Introduction to Clinical Sciences	(6,2)7
MED108	Research Project	(2,0)2
MED114	Problem-Based Learning	(2,0)2
MED116	Medical Biotechnology	(2,0)2
MED110	Turkish II	(2,0)2
COM110	English II	(3,0)3
MED202	Cardiovascular System and Diseases	(106,30)7
MED204	Respiratory System and Diseases	(79,24)5
MED206	Blood-Immune System and Diseases	(95,32)6
MED208	Research Project III	(2,0)2
MED212	Occupational Health & Safety in Medicine	(2,0)2
MED210	Turkish IV	(2,0)0

MED102 Cell and Tissue Systems Development

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Biochemistry	0	14
Biophysics	8	10
General Embryology	0	21
Genetics	5	37
Physiology	12	18
Total	25*	100**

Midterm Results: Overall 50%

Individual assessment weights

*Practical grade: 25%

The percentage of each module's practical evaluation is shown in the table above.

- **Biophysics & Physiology:**

The evaluation of the practical will be done during the practical sessions through

- 1) formative evaluations (quizzes, oral exams, assignments, etc.).
- 2) practical exam at the end of the committee.

- **Genetic:**

The evaluation of the practical will be done during the practical sessions through

- 1) formative evaluations (quizzes, oral exams, assignments, etc.).

**Committee Theoretical Exam: 75%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

**Committee Theoretical Exam: 100%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Biochemistry

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biochemistry	MED102	2024-2025	SPRING	14+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To learn about biochemical and metabolic changes in cancer cells. To become familiar with the importance and activities of macro and trace elements. To learn about different body fluids, their biochemical components and functions. To learn about the components of blood and biochemical concepts of erythrocyte membrane. To become familiar with functions and activities of plasma proteins, hemoglobin and myoglobin. To learn about the process of coagulation. To become familiar with porphyrins and bile pigments.

Reading List	
No	Textbooks and/or References
1	Medical Biochemistry - Antonio Blanco & Gustavo Blanco - Second Edition
2	Essentials of Medical Biochemistry – Eun Ha, C. & Bhagavan, N. V. – Third Edition
3	Textbook of Biochemistry for Medical Students – Vasudevan, D. M., Sreekumari S. & Vaidyanathan K. – Sixth Edition
4	Lecture notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Cancer biochemistry (1/2)	1, 2, 3, 4
1	Cancer biochemistry (2/2)	1, 2, 3, 4
2	Macro elements and trace elements (1/2)	1, 2, 3, 4

2	Macro elements and trace elements (2/2)	1, 2, 3, 4
3	Body fluids and electrolytes (1/2)	1, 2, 3, 4
3	Body fluids and electrolytes (2/2)	1, 2, 3, 4
4	Blood and erythrocyte membrane (1/2)	1, 2, 3, 4
4	Blood and erythrocyte membrane (2/2)	1, 2, 3, 4
5	Plasma proteins (1/2)	1, 2, 3, 4
5	Plasma proteins (2/2)	1, 2, 3, 4
6	Hemoglobin and myoglobin (1/2)	1, 2, 3, 4
6	Hemoglobin and myoglobin (2/2)	1, 2, 3, 4
7	Coagulation, porphyrins, and bile pigments (1/2)	1, 2, 3, 4
7	Coagulation, porphyrins, and bile pigments (2/2)	1, 2, 3, 4

Biophysics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biophysics	MED102	2024-2025	Spring	10+6	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Hilmi Yanar
E-mail	hyanar-lau@eul.edu.tr
Office Hours Schedule	-----
Phone	-----
Office/Room No	-----

Course Objectives
<p>The aims of this course are</p> <ul style="list-style-type: none">• to introduce the basic concepts and principles of Cell and Tissue Biophysics• to discuss bioelectrical processes occurring in the cell• to cover basic concepts and principles of the muscle contraction biophysics and synaptic transmission.

Course Learning Outcomes
<p>At the end of this course, the student;</p> <ol style="list-style-type: none">1) defines active and passive transport processes;2) explains the electrical properties of the cell membrane;3) defines an equivalent electrical circuit for the cell membrane;4) calculates the resting membrane potential using the Goldman-Hodgkin-Katz equation;5) calculates the resting membrane potential using the electrical equivalent circuit model in the presence of active and passive transport;6) compares action potentials occurring in different cells;7) explains the differences between action potential and Graded potentials;8) explains the phases of the action potential occurring in a nerve cell;9) explains the differences between Compound Action potential and Action potential;10) describes the concept of electric dipole and calculate the electrical potential created by a dipole;11) explains the patch clamping method;12) describes the muscle contraction processes;

13) explains synaptic transmission and factors affecting conduction speed;

Reading List	
No	Textbooks and/or References
1	F. Pehlivan, Biophysics, 10 th Edition, 2019.
2	Armin Kargol, Introduction to Cellular Biophysics, Volume 1, Morgan & Claypool Publishers, 2019.
3	J. A. Tuszynski, Molecular and Cellular Biophysics, 2008.
4	E. R. Kandel et al., Principles of Neural Science, 6 th Edition, New York; Elsevier (2021).
5	Guyton and Hall, Textbook of Medical Physiology, 14 th Edition, 2021.
6	William C. Parke, Biophysics: A Student's Guide to the Physics of the Life Sciences and Medicine, 2020.
7	Kirsten Franklin et al., Introduction to Biological Physics for the Health and Life Sciences, 2 nd Edition, 2019.
8	Paul Davidovits, Physics in Biology and Medicine, 5 th Edition, 2019.
9	Glaser, Roland. Biophysics: an introduction. Springer Science & Business Media, 2012.
10	Widmaier E.P., Raff H., Strang K.T. Vander's Human Physiology. Mc Graw Hill Education, (2019).
11	T. F. Weiss, Cellular Biophysics Volume 2: Electrical Properties, MIT Press, 1996.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Electrical properties of the cell membrane and Membrane potential	1, 2, 3, 5, 6, 7, 8, 9, 11
1	Nernst equation and Goldman–Hodgkin–Katz equation	1, 2, 3, 5, 6, 7, 8, 9, 11
2	Graded potentials and Action potentials	1, 2, 3, 5, 10, 11
2	Cable theory, Passive and Active membrane model and voltage-gated channels	1, 11
3	Electric Dipole concept, compound action potential	1 & 4
3	Synaptic transmission and the factors affecting conduction speed	1 & 4
3	Voltage clamping, patch clamping	1 & 11
4	Neural coding and information transmission	1 & 4
4	Biophysics of muscle contraction (1/2)	1
4	Biophysics of muscle contraction (2/2)	1
8	Committee III Exam	

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Practical 1: Calculations on the Nernst equilibrium potential and the Goldman-Hodgkin-Katz equation (1/2)	Practical 1
5	Practical 1: Calculations on the Nernst equilibrium potential and the Goldman-Hodgkin-Katz equation (2/2)	Practical 1
6	Practical 2: Calculations on the equivalent electrical circuit of a neuron and electrical equivalent circuit for the postsynaptic membrane (1/2)	Practical 2
6	Practical 2: Calculations on the equivalent electrical circuit of a neuron and electrical equivalent circuit for the postsynaptic membrane (2/2)	Practical 2
7	Practical 3: Practical exam	Practical 3
7	Practical 3: Practical exam	Practical 3

General Embryology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
General Embryology	MED102	2024-2025	SPRING	21+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rasime Kalkan
E-mail	rkalkan@eul.edu.tr
Office Hours Schedule	Friday 14:00-17:00
Phone	
Office/Room No	CL109

Course Objectives
The aim is to provide the understanding of the anatomical relationships of major structures of the body. Congenital malformations associated with given organ systems will also be discussed. The learning outcomes of this course are 1) to identify the major developmental events associated with each organ system of the human body 2) to discuss mechanisms that lead to malformations associated with each organ system 3) to describe the sequence of events leading in implantation and organogenesis 4) to describe developmental processes associated with each organ system 5) to list and describe the major malformations associated with each organ system.

Reading List	
No	Textbooks and/or References
1	Girssh, E.,2021, A Textbook of Clinical Embryology
2	Cochard, L., R.,2012, Netter's Atlas of Human Embryology
3	Gary C. Schoenwolf et al., 2021, Larsen's Human Embryology
4	Torchia,M.G., Persaud, T. V. N. , 2020, Concise Clinical Embryology: an Integrated, Case-Based Approach

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to embryology	1,2
1	Genetics of gamete formation (1/2)	1,2

1	Genetics of gamete formation (2/2)	1,2
2	Gametogenesis: Spermatogenesis	1,2
2	Gametogenesis: Oogenesis	1,2
2	Menstrual Cycle	1,2
3	Fertilization	1,4
3	Implantation	1,4
3	1st Week of Development	1,4
4	2nd Week of Development	1,4
4	3rd Week of Development (1/2)	2,3
4	3rd Week of Development (2/2)	2,3
5	4th & 8 week of Development	1,2
5	Fatal and neonatal Period of Development	2,3
5	Placental and fetal membranes (Extraembryonic development)	3,4
6	Principles and Mechanisms of Morphogenesis and Dymorphogenesis (1/3)	3,4
6	Principles and Mechanisms of Morphogenesis and Dymorphogenesis (1/3)	3,4
6	Principles and Mechanisms of Morphogenesis and Dymorphogenesis (1/3)	3,4
7	Teratology	1,2
7	Clinical embryology and assisted reproductive techniques	4

Genetics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Genetics	MED102	2024-2025	Spring	31+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rasime Kalkan Asst. Prof. Dr. Ayşe Ertay
E-mail	rkalkan@eul.edu.tr ayertay@eul.edu.tr
Office Hours Schedule	14:00-17:00
Phone	2730 (Asst. Prof. Dr. Ayşe Ertay)
Office/Room No	CL109 (Prof. Dr. Rasime Kalkan) CL106 (Asst. Prof. Dr. Ayşe Ertay)

Course Objectives
The aim is to introduce medical genetics. The learning outcomes of this course are 1) to understand the inheritance patterns and genetic diseases; 2) to understand the cell cycle, death, and cancer interaction; 3) to understand the pedigree; 4) to understand prenatal diagnosis and molecular diagnostic technologies

Reading List	
No	Textbooks and/or References
1	Albert et al., 2022, Molecular Biology of the Cell, 7th Edition
2	Strachan, T., Lucassen, A., 2022, Genetics and Genomics in Medicine
3	Turnpenny., P.D., et al.,2021, Emery's Elements of Medical Genetics and Genomics
4	Nussbaum, R.A., 2015, Thomson&Thomson, Genetics in Medicine, 8th Edition
5	Jorde, L.B., et al., 2019., Medical Genetics
6	Brown T, 2018, Genomes 4, 4 th Edition
7	Russel P J., 2010, Genetics: A Molecular Approach, 3 rd Edition
8	Clark D, Pazdernik N. J. & McGehee M. R, 2019, Molecular Biology, 3 rd Edition
9	Lodish et al., 2020, Molecular Cell Biology, 9 th Edition
10	Lewis, R., 2021, Human Genetics Concepts and Applications, 13 th Edition

11	Pasternak, J. J., 2005, An introduction to human molecular genetics: Mechanisms of Inherited Diseases, 2 nd Edition
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WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Genetics and Gene Structure (Prof. Dr. Rasime Kalkan)	4,5
1	Genome; Human Genome Project; Central Dogma (Prof. Dr. Rasime Kalkan)	1, 5
1	RNA Structure and Types: mRNA, miRNA, siRNA (Asst. Prof. Dr. Ayşe Ertay)	6, 8
1	DNA Replication (Asst. Prof. Dr. Ayşe Ertay)	1, 6, 8,9
1	DNA Damage (Prof. Dr. Rasime Kalkan)	1,5
1	DNA Mutations (Asst. Prof. Dr. Ayşe Ertay)	6,7
1	DNA Repair Systems (Asst. Prof. Dr. Ayşe Ertay)	6,7
2	Transcription (Prof. Dr. Rasime Kalkan)	1,2
2	Post-Transcriptional Modifications (Prof. Dr. Rasime Kalkan)	1,2
2	Gene Expression Control Mechanisms (Asst. Prof. Dr. Ayşe Ertay)	7, 8
2	Translation (Asst. Prof. Dr. Ayşe Ertay)	8
2	Post-translational Modifications (Asst. Prof. Dr. Ayşe Ertay)	8
2	Epigenetics (Prof. Dr. Rasime Kalkan)	4,5
2	Population Genetics (Prof. Dr. Rasime Kalkan)	1, 2
3	Human Genetic Variability and its Consequences (1/2) (Prof. Dr. Rasime Kalkan)	1, 2
3	Human Genetic Variability and its Consequences (2/2) (Prof. Dr. Rasime Kalkan)	1, 2
3	Cell Cycle & Control (Asst. Prof. Dr. Ayşe Ertay)	1, 9
3	Mitosis (Asst. Prof. Dr. Ayşe Ertay)	1, 9
3	Molecular Basis of Genetic Diseases (Prof. Dr. Rasime Kalkan)	4,5
4	Chromosomal Diseases & Diagnostic Tools (1/2) (Prof. Dr. Rasime Kalkan)	4,5
4	Chromosomal Diseases & Diagnostic Tools (2/2) (Prof. Dr. Rasime Kalkan)	4,5
4	Cancer Genetics (1/2) (Asst. Prof. Dr. Ayşe Ertay)	7,10, 11
4	Cancer Genetics (2/2) (Asst. Prof. Dr. Ayşe Ertay)	7,10, 11
4	Meiosis (Crossing Over) and Genetic Recombination (Asst. Prof. Dr. Ayşe Ertay)	1,9
5	Mendel Genetics and Mendelian Principle; Genetic control mechanisms and diseases; Modes of Inheritance (1/3) (Prof. Dr. Rasime Kalkan)	4, 5

5	Mendel Genetics and Mendelian Principle; Genetic control mechanisms and diseases; Modes of Inheritance (2/3) (Prof. Dr. Rasime Kalkan)	4, 5
5	Mendel Genetics and Mendelian Principle; Genetic control mechanisms and diseases; Modes of Inheritance (3/3) (Prof. Dr. Rasime Kalkan)	4, 5
5	Recombinant DNA Technologies and Genetic Engineering (1/2) (Asst. Prof. Dr. Ayşe Ertay)	10, 11
5	Recombinant DNA Technologies and Genetic Engineering (2/2) (Asst. Prof. Dr. Ayşe Ertay)	10, 11
6	Non-Mendelian Inheritance; Polygenetic Inheritance; Epigenetics (1/2) (Prof. Dr. Rasime Kalkan)	4, 5
6	Non-Mendelian Inheritance; Polygenetic Inheritance; Epigenetics (2/2) (Prof. Dr. Rasime Kalkan)	4, 5
6	Targeted Therapy (Asst. Prof. Dr. Ayşe Ertay)	10
6	Approaches to Medical Pedigrees (Asst. Prof. Dr. Ayşe Ertay)	4, 5
7	Genotype-Phenotype Relationship (Prof. Dr. Rasime Kalkan)	2,4,5
7	Genetic Diseases Treatment (Prof. Dr. Rasime Kalkan)	2,4,5
7	Prenatal Diagnosis (1/2) (Prof. Dr. Rasime Kalkan)	4, 5
7	Prenatal Diagnosis (2/2) (Prof. Dr. Rasime Kalkan)	4, 5
8	Exam	

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Introducing the cases and pedigree analysis (1/2)	Practical 1
3	Introducing the cases and pedigree analysis (2/2)	Practical 1
4	Introducing the cases and pedigree analysis (1/2)	Practical 2
4	Introducing the cases and pedigree analysis (2/2)	Practical 2
5	Case and molecular diagnostic tools discussion (1/2)	Practical 3
5	Case and molecular diagnostic tools discussion (2/2)	Practical 3
6	Case and genetic counseling (1/2)	Practical 4
6	Case and genetic counseling (2/2)	Practical 4

Physiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Physiology	MED102	2024-2025	Spring	18+10	-

Course Language
English

Course Lecturer Details	
Name & Surname	NAZEMİN GÜRSOY KARAMAN
E-mail	gursoynazemin@yahoo.com
Office Hours Schedule	28
Phone	05428611721
Office/Room No	

Course Objectives
An overall goal of this course is to enable students to understand the role of molecules, cells, tissues, organs, and organ systems (endocrine, nervous, muscular and immune systems) in human health and disease. This class focuses on understanding physiology –the functioning of a living organism and its component parts. This requires going beyond memorization of facts to acquire an understanding of how and why the body functions the way it does, and what happens when it does not function properly.

Reading List	
No	Textbooks and/or References
1	Guyton and Hall Human Physiology
2	Willian Ganong Review of Medical Physiology
3	Susan E. Mulroney- Adam K. Meyers Netters Essential Physiology
4	Vander Human Physiology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Central Principles of General Physiology	1-4
1	Body Fluid Compartments	1-4
1	Transport Across Cell Membrane	1-2-3-4
1	Osmotic Equilibrium Regulation	1
2	Cell Membrane Physiology	1-2-4
2	Cell Physiology	1-2-4
2	Cell Signaling	1-2-4
2	Nerve Cell Properties	1-2-3-4
3	Membrane Potentials	1-2-3
3	Skeletal Muscle Electrical and Structural Properties	1-2-4
4	Skeletal Muscle Contraction and Relaxation Properties	1-2
4	Smooth Muscle Electrical and Structural Properties	1-2
5	Smooth Muscle Contraction and Relaxation Properties	1-2
5	Cardiac Muscle Electrical and Structural Properties	1-2
6	Cardiac Muscle Contraction and Relaxation Properties	1-2
6	Connective Tissue	1-2
7	Epithelial Tissue	1-2-3-4
7	Physical Properties of Blood	1-2-3-4
8	Exam	

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Hemolysis (1/2)	Practical 1
3	Hemolysis (2/2)	Practical 1
4	Hematocrit and Sedimentation Rate Measurement (1/2)	Practical 2
4	Hematocrit and Sedimentation Rate Measurement (2/2)	Practical 2
5	Body Fluid Compartments (1/2)	Practical 2
5	Body Fluid Compartments (2/2)	Practical 2
6	Skeletal Muscle Electrical and Mechanical Activity (1/2)	Practical 3
6	Skeletal Muscle Electrical and Mechanical Activity (2/2)	Practical 3
7	Cardiac Muscle Excitation Mechanism (1/2)	Practical 4
7	Cardiac Muscle Excitation Mechanism (2/2)	Practical 4

MED104 Introduction to Clinical Sciences

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Behavioral Sciences	0	16
Biophysics	9	12
First Aid	0	18
General Microbiology	2	14
General Pathology	9	22
General Pharmacology	0	18
Professional Skills Practices	10	0
Total	30*	100**

Midterm Results: Overall 50%

Individual assessment weights

*Practical grade: 30%

The percentage of each module's practical evaluation is shown in the table above.

- **Biophysics & General Pathology:**

The evaluation of the practical will be done during the practical sessions through

- 3) formative evaluations (quizzes, oral exams, assignments, etc.).
- 4) practical exam at the end of the committee.

- **General Microbiology & Professional Skills Practices:**

The evaluation of the practical will be done during the practical sessions through

- 2) formative evaluations (quizzes, oral exams, assignments, etc.).

**Committee Theoretical Exam: 70%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

**Committee Theoretical Exam: 100%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Behavioral Sciences

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Behavioral Sciences	MED104	2024-2025	Spring	16+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof.Dr.Zihniye Okray
E-mail	zokray@eul.edu.tr
Office Hours Schedule	Thursday 12:00-15:00
Phone	2722
Office/Room No	ECZ012

Course Objectives
In the behavioral sciences course, biopsychosocial aspects of behavior, consciousness, perception, learning, mental development theories, personality structures and patient psychology are explained.

Reading List	
No	Textbooks and/or References
1	Coon, D., & Mitterer, J. O. (2013). Introduction to psychology: Gateways to mind and behavior.
2	Texts and handouts given by the lecturer

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Definition, history and place of psychology in medicine. Schools of Psychology and application areas of psychology	1,2
2	Bio-psychosocial Approach	1,2
3	Sensing and Perceiving	1,2
3	Consciousness, Sleep and Dream	1,2
4	Mental Development, Intelligence, Learning Theories	1,2
6	Personality, Ego, Ego Defense Mechanisms	1,2

7	Patient Psychology and Patient Psychology In Medical Interventions	1,2
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Biophysics

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biophysics	MED104	2024-2025	Spring	12+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Hilmi Yanar
E-mail	hyanar-lau@eul.edu.tr
Office Hours Schedule	-----
Phone	-----
Office/Room No	-----

Course Objectives
The aims of this course are <ul style="list-style-type: none">• to examine the circulatory, respiratory, visual and auditory systems from a biophysical perspective.• to discuss the biophysical basis of the ECG.

Course Learning Outcomes
At the end of this course, students will be able to; 14) explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms; 15) list and explain the laws of physics used to explain circulatory system; 16) express the structure and function of circulatory and respiratory systems; 17) describe biophysical basis of ECG; 18) express the breathing mechanism; 19) explain the physical basis of inspiration and expiration; 20) list and explain the laws of physics used in respiratory mechanism; 21) identify the nature of light; 22) explain the basic ideas of geometrical optics and illustrates how images are formed through reflection and refraction; 23) explain the refractive defects in vision; 24) determine the resolving power of the eye; 25) explain how the inner ear receives, transduces and preprocesses acoustic information before it is transmitted to the brain;

26) state properties and sensory characteristics of sound;

Reading List	
No	Textbooks and/or References
1	F. Pehlivan, Biophysics, 10 th Edition, 2019.
2	Irving P. Herman, Physics of the Human Body, 2 nd Edition, 2021.
3	Glaser, Roland. Biophysics: an introduction. Springer Science & Business Media, 2012.
4	Guyton and Hall, Textbook of Medical Physiology, 14 th Edition, 2021.
5	William C. Parke, Biophysics: A Student's Guide to the Physics of the Life Sciences and Medicine, 2020.
6	Kirsten Franklin et al., Introduction to Biological Physics for the Health and Life Sciences, 2 nd Edition, 2019.
7	Paul Davidovits, Physics in Biology and Medicine, 5 th Edition, 2019.
8	Ganong's Review of Medical Physiology, 26 th Edition, 2019.
9	Vasantha Pattabhi, N. Gautham, Biophysics, 2002.
10	R. K. Hobbie and B. J. Roth, "Intermediate Physics for Medicine and Biology", 4 th Edition, New York: Springer, 2006.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Biophysics of circulatory system	[1-7]
1	Fluids and Pressure-Flow Relationship	[1-7]
1	Bernoulli's principle and the concept of viscosity	[1-7]
1	Poiseuille's Law and Laplace's Law	[1-7]
2	ECG, Heart Dipole and Einthoven's Triangle	[1, 4, 8]
2	Biophysics of Vision (1/2)	[1,2], [5-7], [9-10]
2	Biophysics of Vision (2/2)	[1,2], [5-7], [9-10]
3	Biophysics of Hearing (1/2)	[1-3], [5-7], 9
3	Biophysics of Hearing (2/2)	[1-3], [5-7], 9
5	Respiratory Biophysics (1/2)	[1, 2, 4, 8]
5	Respiratory Biophysics (2/2)	[1, 2, 4, 8]
6	Respiratory system compliance and resistance	[1, 2, 4, 8]

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Practical 1: Flow Resistance and Coefficient of Viscosity (1/2)	Practical 1
5	Practical 1: Flow Resistance and Coefficient of Viscosity (2/2)	Practical 1

6	Practical 2: Einthoven's Triangle	Practical 2
6	Practical 3: Biophysics of Vision (1/2)	Practical 3
7	Practical 3: Biophysics of Vision (2/2)	Practical 3
7	Practical 4: Biophysics of Hearing (1/2)	Practical 4
7	Practical 4: Biophysics of Hearing (2/2)	Practical 4

First Aid

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
First Aid	MED104	2024-2025	SPRING	17+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Ridvan Atilla
E-mail	atillamd@yahoo.com
Office Hours Schedule	
Phone	905323164222
Office/Room No	

Course Objectives
First aid course focuses on the fundamental skills and knowledge that would enable pupil to act promptly under emergency conditions. The main objectives are composed of rapid assessment, summoning professional help, providing immediate care, protecting the unconscious and promoting competence and confidence.

Reading List	
No	Textbooks and/or References
1	Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 9th Edition, 2019
2	Roberts and Hedges' Clinical Procedures in Emerg. Med. and A. Care 7th Edition, 2018
3	Rosen's Emergency Medicine: Concepts and Clinical Practice: 10th Edition. 2022

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	What is First Aid	1
5	Evaluation of the Person in Need of First Aid And Crime Scene	1
5	Evaluation of Patient's Vital Signs	1
5	Patient And Injured Transport Techniques	1
6	Basic Life Support (1/2)	2
6	Basic Life Support (2/2)	2
6	First Aid in Disorders of Consciousness	3
6	Pediatric Basic Life Support	3

6	First Aid for Bleeding	2
6	First Aid for Poisoning	2
7	First Aid for Hypothermia, Hyperthermia	2
7	First Aid for Drowning	3
7	First Aid for Foreign Body in EENT	3
7	First Aid for Burns and Electrical Shock	3
7	First Aid for eye, ear, nose injuries and animal bites	3
7	PANEL: Human-made Disasters, Extraordinary Situations (1/2)	3
7	PANEL: Human-made Disasters, Extraordinary Situations (2/2)	3

General Microbiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
General Microbiology	MED104	2024-2025	Spring	14+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	14:00-17:00 (Monday)
Phone	2735
Office/Room No	ECZ015

Course Objectives
<p>The aim of this course is to provide students with sufficient knowledge and skills about the definition and history of microbiology, microorganism groups and their general characteristics, microbial flora, sterilization-disinfection and infectious diseases.</p> <p>The learning outcomes of this course are</p> <ol style="list-style-type: none">1) To have knowledge about microbiology department;2) To understand the general characteristics of bacteria, viruses, parasites and fungi;3) To learn the infections caused by infectious agents (pathogenic microorganisms) and prevention methods;4) To understand the sterilization and disinfection processes;5) To have knowledge about the relationship between microbiota and host;6) To understand the current knowledge about diagnostic methods.

Reading List	
No	Textbooks and/or References
1	Ustaçelebi 1999, Basic and Clinical Microbiology
2	Riedel et al., 2019, Jawetz Melnick & Adelbergs Medical Microbiology, 28 th Edition
3	Murray et al., 2015, Medical Microbiology, 8 th Edition
4	Korkmaz and Ok, 2011, Laboratory in Parasitology
5	Özlü et al., 2021, Artificial Intelligence and Applications in Health

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No

1	Introduction to Microbiology / Classification of Microorganisms	1 and 2
2	Host-Microorganism Relationship / Sterilization, Disinfection and Antisepsis	1 and 2
3	Bacterial Morphology / Bacterial Growth	2
5	Introduction to Medical Parasitology / Importance of Arthropods	3 and 4
5	Classification and General Characteristics of Viruses	3
6	Introduction to Mycology	3
6	Use of Artificial Intelligence in Microbiology / Effect of Microbiota on Infectious Diseases	3 and 5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Equipment, Tools and Devices Used in the Microbiology Laboratory	Practical 1
5	Gram Staining / Examination of Bacteria	Practical 2
6	Preparation of Stool Samples / Examination of Intestinal Parasites	Practical 3
6	Preparation and Examination of Blood Smears (<i>Plasmodium</i> spp. and <i>Leishmania</i> spp.)	Practical 4

General Pathology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
General Pathology	MED104	2024-2025	SPRING	22+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Lema Tavli
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	5391062400
Office/Room No	CL110

Course Objectives
To cover the basic reactions of cells and tissues to injury that underlie all disease processes and include cell injury and death, circulatory disturbances, inflammation and repair and disturbances of growth and neoplasia.

Reading List	
No	Textbooks and/or References
1	Kumar, V., Abbas, A. K., & Aster, J. C. (2020). Robbins and Cotran Pathologic Basis of Disease (10th ed.). Elsevier.
2	Rosai, J. (2011). Rosai and Ackerman's Surgical Pathology (10th ed.). Elsevier.
3	Abbas, A. K., Lichtman, A. H., & Pillai, S. (2021). Cellular and Molecular Immunology (10th ed.). Elsevier.
4	Weinberg, R. A. (2013). The Biology of Cancer (2nd ed.). Garland Science.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Pathology	1,2,3,4,
1	Cell Injury (1/2)	1,2,3,4,
1	Cell Injury (2/2)	1,2,3,4,
1	Body fluids and edema,	1,2,3,4,
2	Hemostasis, Thrombosis, Thromboembolism	1,2,3,4,
2	Intracellular Accumulations	1,2,3,4,
2	Hyperemia, Congestion, Hemorrhage	1,2,3,4,

2	Cellular Adaptations	1,2,3,4,
3	Infarction and Shock	1,2,3,4,
3	Leukocyte Activation	1,2,3,4,
4	Chemical Mediators of Inflammation	1,2,3,4,
4	Tissue Repair	1,2,3,4,
4	Acute Inflammation	1,2,3,4,
4	Chronic Inflammation	1,2,3,4,
5	Necrosis and Apoptosis	1,2,3,4,
5	Cancer Susceptibility	1,2,3,4,
5	Carcinogenesis	1,2,3,4,
5	Tumor Cell Development	1,2,3,4,
5	Oncogenes and Tumor Suppressor Genes	1,2,3,4,
5	Benign and Malignant Tumors (1/3)	1,2,3,4,
6	Benign and Malignant Tumors (2/3)	1,2,3,4,
6	Benign and Malignant Tumors (3/3)	1,2,3,4,

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
6	Intracellular Accumulations (1/2)	1,2,3,4
6	Intracellular Accumulations (2/2)	1,2,3,4
6	Cell Adaptations and Hemodynamic Disorders (1/2)	1,2,3,4
6	Cell Adaptations and Hemodynamic Disorders (2/2)	1,2,3,4
7	Acute Inflammation, Necrosis, Apoptosis. Neoplasia (1/2)	1,2,3,4
7	Acute Inflammation, Necrosis, Apoptosis. Neoplasia (1/2)	1,2,3,4
7	Necrosis, Apoptosis, and Neoplasia (1/2)	1,2,3,4
7	Necrosis, Apoptosis, and Neoplasia (1/2)	1,2,3,4

General Pharmacology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
General Pharmacology	MED104	2024-2025	Spring	17+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rümeysa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	10:00-13:00
Phone	2802
Office/Room No	CL-110

Course Objectives
<p>The aim is to provide an introduction to general pharmacology.</p> <p>The learning outcomes of this course are</p> <ol style="list-style-type: none">1) to explain and apply the core theories, concepts, and processes of Pharmacology.2) to understand the principles of pharmacokinetics; the factors that influence the variability of response to drugs and the main mechanisms and effects of drug interactions.3) to address qualitative and quantitative concepts related to the processes of ADME, i.e. the set of events that bring a drug into the human body (Absorption), distribute it in the various organs and tissues (Distribution), the bio-transformation (Metabolism) and remove it from the body itself (Elimination).;4) to apply the knowledge of the basic biomedical sciences (e.g., physiology, biochemistry, genetics, pathology) to the evaluation of drug actions5) to integrate learned scientific knowledge with newly acquired information to produce plausible scientific explanations of phenomena

Reading List	
No	Textbooks and/or References
1	Rang & Dale's Pharmacology., 10 th Ed, 2023, Elsevier Health Sci
2	Bertram Katzung 14 th Ed., Basic & Clinical Pharmacology, McGrawHill
3	L, Brunten, et al., Goodman & Gillman Pharmacological Basis of Therapeutics 14 th Ed., McGrawHill

4	Joseph DiPiro, et al., 11 th Ed, Pharmacotherapy: A Pathophysiological Approach McGrawHill
5	M J Neal., Medical Pharmacology at a Glance 9 th Ed, Wiley

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Pharmacology	1 - 5
1	Drug Administration Sites	3
1	Drug Administration Sites	3
1	Pharmacokinetics	1 & 2
2	Pharmacokinetics	1 & 2
2	Mechanisms of Drug Action	4 & 5
2	Mechanisms of Drug Action	4 & 5
2	Drug Toxicity	1-5
3	Receptors & Signal Transduction	1-3
3	Receptors & Signal Transduction	1-3
4	Dose Response	1,2,5
4	Dose Response	1,2,5
4	Factors that Change Drug Effects	3
5	Factors that Change Drug Effects	3
5	Rational Drug Use	3 & 5
6	Pharmacogenetics	2
6	Pharmacovigilance	5

Professional Skill Applications

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Professional Skills Practices	MED104	2024-2025	Spring	0+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Moath Alkhazali
E-mail	malkhazali@eul.edu.tr
Office Hours Schedule	Monday 9-11
Phone	00905338604682
Office/Room No	Nursing department /1

Course Objectives
It is aimed to gain knowledge and skills about basic student's practices, competencies, interventional practices procedures, and providing care to patients

Reading List	
No	Textbooks and/or References
1	Elizabeth Burns et al (2011). Oxford American Handbook of Clinical Examination and Practical Skills
2	Kozier & ERB'S. Fundamentals of Nursing, Concepts, Process and Practice'', Tenth Edition, by Pearson, 2016.

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
1	Vital signs (1/2)	1,2
1	Vital signs (2/2)	1,2
3	Infection control (standard precaution), clean and surgical hand washing (1/2)	1,2
3	Infection control (standard precaution), clean and surgical hand washing (2/2)	1,2
4	Head-to-toe physical examination, Catheter insertion (1/2)	1,2
4	Head-to-toe physical examination, Catheter insertion (2/2)	1,2
5	Safe injection practice and Injection route (I.V-I.M-S.C) (1/2)	1,2
5	Safe injection practice and Injection route (I.V-I.M-S.C) (2/2)	1,2

Electives Syllabus

Research Project

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Research Project	MED108	2024-2025	Spring	28	2

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rümeyza Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	2802
Office/Room No	

Exam Evaluation	
Midterm Report	50%
Final Report: Poster Presentation	50%

Course Objectives
1) To show how should be the format and how to make the layout of the poster. 2) To highlight where the students can find the sources/references for the poster. 3) To teach why the referencing/plagiarism is important in the poster. 4) To teach how the poster presentation should be.

Reading List	
No	Textbooks and/or References
1	Papers related to the topics

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introducing the scientific poster	1
2	Deciding the topic and title of the poster	1
3	Scientific sources/papers	1
4	Referencing style for the posters	1
5	How to write an abstract	1

6	How to write the main body	1
7	How to arrange/organize the poster on the powerpoint	1
8	Midterm Exam	
9	Self-Study to prepare the poster and discussion with the supervisor-Draft 1	1
10	Self-Study to prepare the poster and discussion with the supervisor-Draft 2	1
11	Self-Study to prepare the poster and discussion with the supervisor-Draft 3	1
12	Self-Study to prepare the poster and discussion with the supervisor-Draft 4	1
13	Finalizing the poster	1
14	Oral Presentation	1

Problem-Based Learning (PBL)

EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Medicine"								
"MED114 Problem-Based Learning"								
SYLLABUS								
2024-2025 Spring Semester								
Course Code	Course Name	Course Type	Weekly Course Hours			Credits	ECTS	Weekly Time Schedule
			T	A	L			
MED114	Problem-Based Learning	Theory and Practice	2	0	0	2		
Prerequisite		Prerequisite to						
Course Lecturer	Asst. Prof. Dr. Ayşe Ertay				Office Hours Schedule	Friday 14:00-16:00		
E-mail	ayeray@eul.edu.tr							
Phone					Office / Room No	CL-106		
Teaching Assistant(s)	-				Phone	-		
E-mail	-				Office / Room No			
Course Objectives	1) To improve the efficiency of medical education and to help students develop the wide range of skills needed to practice medicine. 2) Ability to work as a team, make judgments when faced with uncertainty, and develop the characteristics of a lifelong learner							
Learning Outcomes	To learn how to interpret and present the cases							
Text Books	1	Lecture slides						
	2							
	3							
	4							
WEEK	Date	TOPICS					Reference No - Section	
Week 1	14.02.25	Introduction to Problem Based Learning (PBL)					No 1	
Week 2	21.02.25	How does PBL work?					No 1	
Week 3	28.02.25	The Critique of PBL; Adv, Common problems and pitfalls					No 1	

Week 4	07.03.25	Group Work			No 1	
Week 5	14.03.25	Introducing Case 1			No 1	
Week 6	21.03.25	Interpretation and presenting the finding of Case 1			No 1	
Week 7	28.03.25	Midterm Exam			No 1	
Week 8		Midterm Exam Week				
Week 9	11.04.25	Introducing Case 2			No 1	
Week 10	18.04.25	Interpretation of Case 2			No 1	
Week 11	25.04.25	Presenting the finding of Case 2			No 1	
Week 12	02.05.25	Introducing Case 3			No 1	
Week 13	09.05.25	Interpretation of Case 3			No 1	
Week 14	16.05.25	Presenting the finding of Case 3			No 1	
Week 15	23.05.25	Final Exam				
Week 15		Final Exam Week				
Evaluation Tools	Evaluation Tool	Quantity	Date	Weight in Total (%)	Weight in Semester Evaluation (%)	
	Final Exam	1	28.03.25	50	50	
	Semester Evaluation					
	Midterm(s)	1	23.05.25	35	35.0	
	Quiz(zes)					
	Project(s)					
	Homework(s)	1		5	5.0	
	Participation					
Presentations	2		10	10.0		
*** Lifelong Learning Programme (LLP) ***				Language of Instruction:	English	
Evaluation Tool	Quantity	Student Workload Hours		Evaluation Tool	Quantity	Student Workload Hours
Theoretical Hours	14	28.0		Applied Hours		
Midterm	1	1.0		Final	1	1.0
Midterm Study	1	5.0		Final Study	1	5.0
Quiz				Project		
Laboratory				Homework	1	5.0

Atelier				Seminar		
Field Study				Presentation	2	10.0
Other				Self Study	1	5.0
TOTAL :					21	60.0
Recommended ECTS Credit (Total Hours / 30) :						2

Medical Biotechnology

COURSE DESCRIPTION					
MED116-Medical Biotechnology					
Course	Code	Semester	T+P Hours	Credit	ECTS
Medical Biotechnology	MED116	2024-25 Spring	2+0	2	3

Prerequisite	Non
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Course Language	English
Course Type	Core Course
Course Level	Undergraduate
Course Coordinator	-
Course Lecturer	Prof.Dr.Serpil ÜNYAYAR
Course Assistant	-
Course Objectives	To learn the basic concept of biotechnology, used techniques, describe application of stem cell culture in modern medical science and to describe uses of genetic engineering technique in production of various products such as vaccines, proteins and antibiotics.
Course Content	This course contains; Background of Medical Biotechnology, Medical Biotechnology Techniques, Emerging Trends, Products of Medical Biotechnology, Modelling human diseases.

Course Learning Outcomes	Program Learning Outcomes	Teaching Methods	Evaluation Methods
1. Students will be able to explain basic concepts of gene therapy. Describe the expression of cloned proteins in animal cells. Explain methods and various types of gene delivery models.	1	1,2	A,B
2. Students will be able to explain the concept of stem cell culture technology and tissue engineering. Describe application of stem cell culture in modern medical science.	1,2	1,2	A,B

3. Students will be able to describe uses of genetic engineering technique in production of various products. Describe various types of vaccines	1,2,3	1,2	A,B
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Teaching Methods:	1: Lecture method 2: Discussion method 3: Question-Answer Technique
Evaluation Methods:	A: Exam, B: Written Homework

WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES		
WEEK	SUBJECTS	PREPARATION STUDIES
1	Background of medical biotechnology	1,2
2	Polymerase chain reaction	1,2
3	Fluorescence in Situ Hybridization, Sequencing, Microarrays	1,2
4	Cell Culture, Genome editing	1,2
5	Stem cells, The human genome project	1,2
6	Recombinant DNA technology	1,2
7	Gene therapy	1,2
8	EXAM	
9	Production of antibiotics, vaccines	1
10	Stem cell therapy	1,2
11	Molecular Biology and Human disease	1,2
12	CRISPR Cas9	1,2
13	Homework presentations	1,2
14	Homework presentations	1,2
15	Final exam	

Sources

Course Notes / Textbooks	Resources (R):					
	1) Basics of Medical Biotechnology (Al Shima'a Osama and Hend Ahmed, 2020).					
	2) The Cell- Seventh Edition (Cooper and Hausman, 2016, ISBN 978-1-60535-290-9)					
	3- Handed out lecture notes					
Other resources	Web or articles					
SHARED MATERIAL						
Documents	Handed out lecture notes, presentations, PDF files, and research articles					
Homework						
Exams						
EVALUATION SYSTEM						
SEMESTER REQUIREMENTS	NUMBER	PERCENTAGE OF GRADE				
Midterm Exam	1	40				
Quizzes						
Homework Assignments	1	10				
Total		50				
Percentage of Final Work	1	50				
Percentage of Semester Work						
Total		100				
Course Category	Core Course					
THE RELATIONSHIP BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
#	Program Qualifications/Outcomes	* Level of Contribution				
		1	2	3	4	5
	1. To impart training in Biotechnology at advanced level and enthuse the students to understand				X	

basic concept of biotechnology (Understanding skills)		
2. To educate the students to make them confident and capable of accepting any challenge at Global Level (Problem-Solving Skills)	X	
3. To train the students for creating innovative career in research and for higher studies. (Successful Career and Entrepreneurship)	X	

*1 Lowest, 2 Low, 3 Average, 4 High, 5 Highest

ECTS / WORKLOAD TABLE			
Activities	Number	Duration (hours)	Total Workload (hours)
Course Hours (Including Exam Week: 14 x Total Hours)	14	2	28
Out of Class Workload (Preparatory work, reinforcement)			40
Midterm Exam	1		10
Quizzes			
Homework(essay/project/presentation) Assignments	1		5
Final Exam	1		15
Total Workload			98
Total Workload/ 30 (h)			98/30=3
ECTS Credit of Course			3

Language Syllabus

Turkish II

EUROPEAN UNIVERSITY OF LEFKE								
MED110 - TÜRKÇE II								
SYLLABUS								
Course Code	Course Name	Course Type	Weekly Course Hours			Credits	ECTS	Weekly Time Schedule
			T	A	L			
MED110	TURKISH II		2	0	0	0	2	
Prerequisite		Prerequisite to						
Course Lecturer	Assoc. Prof. Dr. Osman ERCİYAS				Office Hours Schedule	Wednesday 15:00 -16: 00		
E-mail	oerciyas@eul.edu.tr							
Phone	2676				Office / Room No	AS240		
Teaching Assistant(s)	-				Phone	0392 660 2676		
E-mail	-				Office / Room No			
Catalogue Descriptions	Turkish pronunciation, vowel harmony, Turkish sentence structure, frequently used words in Turkish, types of dialogue, English-Turkish translation studies, Turkish text reading exercises.							
Course Objectives	To provide students of the Faculty of Medicine whose native language is not Turkish with basic Turkish skills that they can use in their professional lives.							
Learning Outcomes	1. Comprehends the basic phonetic and structural features of Turkish 2. Applies the pronunciation features of Turkish 3. Acquires the basic vocabulary of Turkish 4. Develops Turkish text reading skills 5. Can use Turkish dialogues that are frequently used in daily life.							
Textbooks and/or References	1	Yunus Emre Enstitüsü / A1 düzeyi Türkçe kitapları						
	2	Kurtuluş Öztopçu. Elementary Turkish. İstanbul, 2006.						
	3	COM106 Turkish lecture notes/slides						
	4	Doğan Günay, Özdan Fidan ve diğerleri, Yabancılar İçin Türkçe Ders Kitabı + Alıştırma Kitabı, Papatya Yay., Ankara: 2013.						
WEEK	Date	TOPICS					Reference No - Section	
Week 1		Günlük hayat: Saat kaçta? Ne kadar? Kaç lira? Nerede? Ne zaman?						
Week 2		Ulaşım ile ilgili temel kavramlar, Saat ve zaman dilimleri						

Week 3		Dil Bilgisi: Belirli geçmiş zaman, zaman zarfları, -ile, -yIA, -dAn önce, dAn sonra				
Week 4		Genel Türkçe çalışmaları: Metin ve diyalog çalışmaları ile önceki bilgilerin yoklanması				
Week 5		Okuma ve yazma çalışmaları				
Week 6		Genel tıp terimleri üzerine çalışmalar ve alıştırmalar				
Week 7		Hastanede/klinikte kullanılan kelime ve diyaloglar, Doktor-hasta diyalogu çalışmaları				
Week 8		Hastane, hasta, doktor, muayene konulu Türkçe videoların izlenmesi/yorumlanması				
Week 9		Genel Türkçe çalışmaları: Metin ve diyalog çalışmaları ile önceki bilgilerin yoklanması				
Week 10		Dinleme, okuma ve yazma çalışmaları				
Week 11		Türkçe günler, aylar, mevsimler				
Week 12		İnsan vücudunu tanıma ve organ adlarını öğrenme çalışmaları				
Week 13		Cümle ve metin çeviri çalışmaları				
Week 14		Genel tıp terimleri üzerine çalışmalar ve alıştırmalar				
Evaluation Tools	Evaluation Tool	Quantity	Date	Weight in Total (%)	Weight in Semester Evaluation (%)	
	Final Exam	1		40		
	Semester Evaluation			100		
	Midterm(s)	1		40		
	Quiz(zes)					
	Project(s)					
	Homework(s)					
	Laboratory					
	Other	2		10		
*** Lifelong Learning Programme (LLP) ***				Language of Instruction:	Turkish and English	
Evaluation Tool	Quantity	Student Workload Hours		Evaluation Tool	Quantity	Student Workload Hours
Theoretical Hours	14	28.0		Applied Hours		
Midterm	1	1.0		Final	1	1.0
Midterm Study	2	4.0		Final Study	2	6.0
Laboratory				Homework		
Atelier				Seminar		
Field Study				Presentation	2	2.0
Other				Self Study	7	21.0
TOTAL :					63	2.0

MED202 Cardiovascular System and Diseases

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Anatomy	12	13
Biochemistry	0	4
Clinical Approaches	0	29
Cardiology		15
Cardiovascular Surgery		-
Clinical Evaluation		7
Panel		2
Pediatric		4
Histology/Embryology	6	6
Pathology	3	7
Pharmacology	0	19
Physiology	3	22
Professional Skills Practices	6	0
Total	30*	100**

Midterm Results: Overall 50%

Individual assessment weights

*Practical grade: 30%

The percentage of each module's practical evaluation is shown in the table above.

- **Anatomy and Histology/Embryology:**

The evaluation of the practical will be done during the practical sessions through

- 1) formative evaluations (quizzes, oral exams, assignments, etc.).
- 2) practical exam at the end of the committee.

- **Pathology, Physiology & Professional Skills Practices:**

The evaluation of the practical will be done during the practical sessions through

- 1) formative evaluations (quizzes, oral exams, assignments, etc.).

**Committee Theoretical Exam: 70%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

**Committee Theoretical Exam: 100%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Anatomy

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Anatomy	MED202	2024-2025	SPRING	12+10	-

Course Language
English

Course Lecturer Details	
Name & Surname	Musa Muhtaroğlu
E-mail	mmuhtaroglu@eul.edu.tr
Office Hours Schedule	Wednesday 13:00–14:00, Friday 13:00–14:00.
Phone	05428540684
Office/Room No	CL102

Course Objectives
<ol style="list-style-type: none"> 1- To define the anatomical components of the cardiovascular system, including the heart, arteries, veins, and capillaries. 2- To describe the macroscopic and microscopic anatomy of the heart, including its chambers, valves, and wall layers. 3- To identify the topographic relationships of the heart and great vessels within the thoracic cavity. 4- To classify the arterial and venous systems based on anatomical regions and systemic vs. pulmonary circulation. 5- To interpret anatomical images (e.g., cadaveric, radiological, or schematic) of the cardiovascular structures. 6- To distinguish anatomical variations and clinically relevant features of the heart and vascular system.

Reading List	
No	Textbooks and/or References
1	Drake, R. L., Vogl, A. W., Mitchell, A. W. M. (2023). Gray's Anatomy for Students (5th ed.). Elsevier.
2	Netter, F. H. (2022). Netter Atlas of Human Anatomy: Classic Regional Approach (8th ed.). Elsevier.

3	Paulsen, F., Waschke J. (2023). Sobotta Atlas of Anatomy: English/Latin: General Anatomy and Musculoskeletal System; Internal Organs; Head, Neck and Neuroanatomy (17th ed.). Urban & Fischer.
4	Schünke, M., Schulte, E., Schumacher, U. (2020). Atlas of Anatomy, Three Volume Set (3rd ed.). Thieme.
5	Standring, S. (2020). Gray's Anatomy: The Anatomical Basis of Clinical Practice (42nd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Morphology of the Heart	1-5
1	Coronary Vessels and Topography of the Heart	1-5
1	Anatomy of the Cardiac Conduction System	1-5
1	Pericardium	1-5
2	Arteries of the Head, Neck, and Upper Limb	1-5
2	Arteries of the Thorax and Abdomen	1-5
2	Arteries of the Pelvis and Lower Limb	1-5
2	Veins of the Thorax, Abdomen, Pelvis, and Lower Limb	1-5
3	Systemic, Pulmonary, and Fetal Circulations	1-5
3	Lymphatic System	1-5
3	Hepatic Portal Venous System	1-5
3	General Review	1-5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Heart I and Pericardium	Practical 1
3	Heart I and Pericardium	Practical 1
4	Heart II	Practical 2
4	Heart II	Practical 2
4	Vessels I	Practical 3
4	Vessels I	Practical 3
5	Vessels II	Practical 4
5	Vessels II	Practical 4
5	Vessels III	Practical 5
5	Vessels III	Practical 5

Biochemistry

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biochemistry	MED202	2024-2025	FALL	4+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To learn about arachidonic acid metabolites and their various activities within the human body. To become familiar with various mechanisms that can lead to cardiovascular disease development and their biochemical aspects.

Reading List	
No	Textbooks and/or References
1	Essentials of Medical Biochemistry – Eun Ha, C. & Bhagavan, N. V. – Third Edition
2	Textbook of Biochemistry for Medical Students – Vasudevan, D. M., Sreekumari S. & Vaidyanathan K. – Sixth Edition
3	Lecture notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Arachidonic Acid Metabolism (1/2)	1, 3
4	Arachidonic Acid Metabolism (2/2)	1, 3
4	Biochemistry of Cardiovascular Diseases (1/2)	2, 3
4	Biochemistry of Cardiovascular Diseases (2/2)	2, 3

Clinical Approaches

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Cardiology	Cardiology	MED202	2024-2025	Spring	16+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Emiz Özgür Barış Ökçün Asst. Prof. Dr. Ümit Yaşar Sinan
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
This course aims to provide students with a comprehensive understanding of the diagnosis and management of common cardiovascular conditions. Key objectives include: 1) Interpreting major cardiac symptoms such as chest pain, dyspnea, and palpitations. 2) Understanding the pathophysiology and clinical approach to valvular heart diseases. 3) Identifying and managing cardiac arrhythmias based on ECG interpretation and clinical presentation. 4) Gaining insight into the mechanisms and treatment of atherosclerosis and lipid disorders. 5) Diagnosing and managing coronary artery disease and acute coronary syndromes, including emergency interventions. 6) Recognizing types and stages of heart failure, with emphasis on medical and device-based therapies. 7) Learning the clinical features, diagnostics, and treatment strategies for infective endocarditis, myocarditis, and pericardial diseases. 8) Understanding the classification and management of pulmonary hypertension.

Reading List	
No	Textbooks and/or References
1	Braunwald's Heart Disease International Edition, 12th Edition
2	2023 AHA/ACC/ACCP/ASPC/NLA/PCNA Guideline for the Management of Patients With Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines
3	2024 ESC Guidelines for the management of chronic coronary syndromes

4	2023 ESC Guidelines for the management of cardiomyopathies
5	2022 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death
6	2021 ESC/EACTS Guidelines for the management of valvular heart disease
7	2020 ACC/AHA Guideline for the Management of Patients With Valvular Heart Disease
8	2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension
9	2024 ACC Expert Consensus Decision Pathway on Strategies and Criteria for the Diagnosis and Management of Myocarditis
10	Pericardial Diseases (Guidelines on the Diagnosis and Management of) ESC Clinical Practice Guidelines-2015
11	ESC Guidelines for the management of endocarditis ESC Clinical Practice Guidelines

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Symptoms in Cardiology	1
4	Valve Diseases (1/2)	6, 7
4	Valve Diseases (2/2)	6, 7
4	Arrhythmias (1/3)	1, 5
4	Arrhythmias (2/3)	1, 5
4	Arrhythmias (3/3)	1, 5
4	Lipids and Atherosclerosis	1
4	Coronary Artery Diseases (1/2)	1-3
4	Coronary Artery Disease (2/2)	1-3
4	Acute Coronary Syndrome (1/2)	1
4	Acute Coronary Syndrome (2/2)	1
5	Heart Failure (1/2)	1
5	Heart Failure (2/2)	1
5	Infective Endocarditis, Myocarditis	4, 9, 11
5	Pericardial Diseases	10
5	Pulmonary Hypertension	8

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Clinical Evaluation	Cardiology	MED202	2024-2025	Spring	8+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Emiz Özgür Barış Ökçün
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course is designed to provide students with a focused understanding of high-impact cardiovascular conditions. By the end of the course, students will be able to: 1) Comprehend the anatomy, pathophysiology, and clinical significance of valvular heart diseases, with emphasis on diagnosis, auscultation findings, and current treatment options. 2) Analyze the presentation and management of acute coronary syndromes (ACS), including STEMI and NSTEMI, using current clinical guidelines and emergency protocols. 3) Recognize and classify various cardiac arrhythmias, interpret ECG findings, and apply appropriate acute and long-term treatment strategies. 4) Understand the pathophysiology, classification, and evidence-based treatment of heart failure, including pharmacologic and non-pharmacologic approaches.</p>

Reading List	
No	Textbooks and/or References
1	Braunwald's Heart Disease International Edition, 12th Edition
2	2022 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death
3	2021 ESC/EACTS Guidelines for the management of valvular heart disease
4	2020 ACC/AHA Guideline for the Management of Patients With Valvular Heart Disease

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Valve Diseases (1/2)	3, 4
4	Valve Diseases (2/2)	3, 4
5	Acute Coronary Syndrome (1/2)	1
5	Acute Coronary Syndrome (1/2)	1
5	Arrhythmia (1/2)	1, 2
5	Arrhythmia (1/2)	1, 2
5	Heart Failure (1/2)	1, 2
5	Heart Failure (1/2)	1, 2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Panel	Cardiology	MED202	2024-2025	Spring	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Emiz Özgür Barış Ökçün
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>The objective of this panel is to provide participants with a comprehensive understanding of hypertension, covering its pathophysiology, diagnosis, clinical implications, and evidence-based management strategies. By the end of the session, participants will be able to:</p> <ul style="list-style-type: none"> • Define hypertension and understand its classification based on current international guidelines. • Describe the pathophysiological mechanisms underlying primary and secondary hypertension • Recognize the risk factors, complications, and target organ damage associated with uncontrolled hypertension. • Interpret blood pressure measurements and apply appropriate diagnostic approaches in various clinical scenarios. • Review lifestyle modifications and pharmacological treatment options based on patient profiles • Discuss recent advances and emerging therapies in the management of hypertension. • This panel aims to enhance the clinical decision-making skills of healthcare professionals in the prevention, diagnosis, and management of hypertension.

Reading List	
No	Textbooks and/or References
1	2024 ESC Guidelines for the management of elevated blood pressure and hypertension

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Hypertension (1/2)	1
5	Hypertension (2/2)	1

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Pediatric	Department Of Child Health And Diseases	MED202	2024-2025	Spring	4+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hakan Tekgüç
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
By the end of this course, students will be able to: 1) Understand the normal anatomy and physiology of the cardiovascular system in infants and children. 2) Perform age-appropriate cardiovascular examinations and interpret common diagnostic tools such as ECG, chest X-ray, and echocardiography in pediatric patients. 3) Identify and differentiate between the clinical presentations of cyanosis, dyspnea, and chest pain in children, recognizing both benign and life-threatening conditions. 4) Classify and describe the pathophysiology, diagnosis, and management of congenital heart diseases, including both cyanotic and acyanotic types. 5) Recognize age-specific blood pressure norms and distinguish between primary and secondary hypertension in children, including its causes, complications, and management strategies. 6) Integrate knowledge to develop clinical reasoning for early detection and appropriate referral of pediatric cardiovascular conditions.

Reading List	
No	Textbooks and/or References
1	Kliegman, R. M., St. Geme, J. W., Blum, N. J., Shah, S. S., Tasker, R. C., & Wilson, K. M. (2023). Nelson Textbook of Pediatrics (21st ed.). Elsevier.
2	Allen, H. D., Driscoll, D. J., Shaddy, R. E., & Feltes, T. F. (2016). Moss & Adams' Heart Disease in Infants, Children, and Adolescents (9th ed.). Wolters Kluwer.
3	Park, M. K. (2021). Park's Pediatric Cardiology for Practitioners (7th ed.). Elsevier.

4	Lilly, L. S. (2020). Pathophysiology of Heart Disease: A Collaborative Project of Medical Students and Faculty (7th ed.). Wolters Kluwer.
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WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Cardiovascular System in Pediatrics	1,4
3	Cyanosis-Dyspnea-Chest Pain in Children	2,3
3	Congenital Heart Diseases	1,3
3	Hypertension in Children	2, 4

Histology / Embryology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Histology/Embryology	MED202	2024-2025	Spring	6+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Ayfer FINDIK PAKROOH
E-mail	dr.findik@gmail.com
Office Hours Schedule	
Phone	05488583434
Office/Room No	

Course Objectives
To gain a comprehensive understanding of the embryological development of the heart and blood vessels, including the sequential stages and mechanisms of their formation, and to analyze the histological structure of the cardiovascular system to correlate anatomy with physiological function.

Reading List	
No	Textbooks and/or References
1	The Histology Guide, University of Leeds
2	Digital Histology, University of Commonwealth

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Heart Development (1/2)	1,2
1	Heart Development (2/2)	1,2
1	Vessels Development (1/2)	1,2
1	Vessels Development (2/2)	1,2
1	Cardiovascular System Histology (1/2)	1,2
1	Cardiovascular System Histology (2/2)	1,2

PRACTICAL SESSIONS

Week	Practical Topics	Reference No
1	Cardiovascular System Histology 1 (1/2)	1,2
1	Cardiovascular System Histology 1 (2/2)	1,2
1	Cardiovascular System Histology 2 (1/2)	1,2
1	Cardiovascular System Histology 2 (2/2)	1,2

Pathology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pathology	MED202	2024-2025	SPRING	8+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Lema Tavlı
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	
Office/Room No	CL-105

Course Objectives
The aim of this course is to provide a comprehensive understanding of the normal structure and function of the heart and blood vessels, as well as the pathogenesis, morphological changes, and clinical consequences of cardiovascular diseases. Students are expected to gain foundational knowledge about common and life-threatening conditions such as atherosclerosis, hypertension, myocardial infarction, heart failure, and vascular disorders. This course also emphasizes the correlation between pathological findings and clinical manifestations, preparing students to integrate this knowledge into future diagnostic and therapeutic decision-making processes.

Reading List	
No	Textbooks and/or References
1	Robbins & Cotran, <i>Pathologic Basis of Disease</i> 10th Edition, Elsevier.
2	Akkerman, <i>Cardiovascular Pathology</i> .
3	Braunwald, <i>Heart Disease: A Textbook of Cardiovascular Medicine</i> , 11th Edition, Elsevier.
4	Harrison, <i>Principles of Internal Medicine</i> , 20th Edition, McGraw-Hill Education.
5	Libby, P., <i>The Vascular Biology of Atherosclerosis</i> , Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Hypertensive Vessel Disease and Atherosclerosis	1,2
1	Cardiomyopathies and Heart Valve Diseases	1,2,3

2	Ischemic Cardiac Diseases	1,2,3
2	Vasculitis	1,2,4
3	Cardiac Tumors	1,2,4
3	Blood Vessel Tumors	1,2,4
4	Aneurism	1,2,4
4	Pericardial Pathologies	1,2,4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Cardiovascular Tumors (1/2)	1,2,3,4
3	Cardiovascular Tumors (2/2)	1,2,3,4
5	Vasculitis (1/2)	1,2,3,5
5	Vasculitis (2/2)	1,2,3,5

Pharmacology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pharmacology	MED202	2024-2025	Spring	20+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof Dr. Rumeysa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	0533 8806188
Office/Room No	

Course Objectives
The course is to teach students the principles of autonomic nervous system pharmacology and therapeutics. We will focus on the underlying mechanistic bases of cardiovascular diseases and examine how these relate to therapeutic interventions. Throughout the course, mechanisms, either of disease processes or drug actions are emphasized. In addition, recent developments in the understanding and treatment of cardiovascular disease will be discussed

Reading List	
No	Textbooks and/or References
1	Rang & Dale's Pharmacology., 10th Ed, 2023, Elsevier Health Sci
2	Bertram Katzung 14th Ed., Basic & Clinical Pharmacology, McGrawHill
3	L, Brunten, et al., Goodman & Gillman Pharmacological Basis of Therapeutics 14th Ed., McGrawHill
4	Joseph DiPiro, et al., 11th Ed, Pharmacotherapy: A Pathophysiological Approach McGrawHill
5	M J Neal., Medical Pharmacology at a Glance 9th Ed, Wiley

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to the ANS Pharmacology	2-4
1	Introduction to the ANS Pharmacology	2-4
1	Cholinomimetic Drugs	2-4
1	Cholinomimetic Drugs	2-4

1	Parasympatholytic Drugs	2-4
1	Sympathomimetic Drugs	1,2-4
2	Sympathomimetic Drugs	3-5
2	Sympatholytic Drugs	3-5
2	Hypolipidemic Drugs	1,4
2	Antianginal Drugs and Periferic Vasodilators	5
2	Antianginal Drugs and Periferic Vasodilators	3,4
2	Autacoids: Angiotensins, Kinins and NO	3,4
5	Autacoids: Angiotensins, Kinins and NO	1,2
5	Antiarrhythmic Drugs	1,2
5	Antiarrhythmic Drugs	5
5	Drugs used in Heart Failure treatment	4,5
5	Drugs used in Heart Failure treatment	4,5
5	Diuretics	4,5
5	Antihypertensive Drugs	4,5
5	Antihypertensive Drugs	4,5

Physiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Physiology	MED202	2024-2025	Spring	23+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Nazemin Gürsoy Karaman
E-mail	gursoynazeminahoo.com
Office Hours Schedule	-
Phone	
Office/Room No	-

Course Objectives
<p>By the end of this course, students should have a comprehensive understanding of cardiovascular physiology, including the structural and functional organization of the cardiovascular system, the properties of cardiac muscle, and the electrophysiology of the heart. They will learn about the cardiac cycle, pressure-volume relationships, and the principles of hemodynamics, including blood flow, resistance, and pressure regulation. Additionally, students will explore the regulation of cardiac output, focusing on factors such as the Frank-Starling mechanism and autonomic control. Blood pressure regulation will be covered in detail, emphasizing the roles of baroreceptors, chemoreceptors, and hormonal mechanisms, along with microcirculation and capillary exchange. The course will also examine special circulations, including coronary, cerebral, renal, and pulmonary blood flow, and physiological adaptations to exercise, posture changes, and hemorrhage. Students will gain insight into pathophysiological conditions such as hypertension, heart failure, and shock. Lastly, they will integrate cardiovascular physiology with clinical applications by interpreting physiological measurements, applying theoretical knowledge to clinical scenarios, and understanding the physiological basis of therapeutic interventions.</p>

Reading List	
No	Textbooks and/or References
1	Guyton and Hall Human Physiology
2	Willian Ganong Review of Medical Physiology
3	Susan E. Mulroney- Adam K. Meyers Netters Essential Physiology
4	Vander Human Physiology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to cardiovascular system	1-4
1	Electrophysiological properties of cardiac muscle	1-4
1	Conductive system of heart	1-4
1	Rhythmical Excitation of the Heart	1-4
1	Heart valves and heart sounds	1-4
1	Mechanical function of heart	1-4
1	Atrial and ventricular contraction	1-4
2	Cardiac cycle	1-4
2	Factors that affecting cardiac output	1-4
2	Cardiac Output Venous Return and Regulation	1-4
2	Electrocardiogram (ECG)	1-4
2	ECG-Cardiac Muscle Relationship	1-4
2	Vectorial Analysis and ECG	1-4
2	Cardiac Arrhythmias	1-4
3	Introduction to blood vessels physiology	1-4
3	Local control of blood flow	1-4
3	Hemodynamic Forces	1-4
3	Vascular Compliance, Arteries&Veins	1-4
3	Blood Pressure	1-4
3	Nervous regulation of blood pressure	1-4
3	Long term regulation of arterial pressure	1-4
5	Microcirculation	1-4
5	Lymphatic circulation	1-4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Blood pressure measurements	1
5	Heart sounds and phonocardiography	1
5	Electrocardiogram measurements	1
5	Evaluation of ECG	1

Professional Skills Practices

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Professional Skills Practices	MED202	2024-2025	Spring	0+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Latif Abbasoğlu
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>The objective of this course is to equip students with essential clinical skills required for patient assessment and basic procedural interventions. Upon successful completion of the course, students will be able to:</p> <p>Perform Intravenous Procedures: Safely administer intravenous (IV) injections, draw blood samples using correct techniques, and carry out blood transfusion procedures while adhering to standard safety protocols.</p> <p>Conduct Vascular and Pulse Examinations: Identify key anatomical landmarks of arteries and veins, perform thorough vascular assessments, and accurately palpate and interpret peripheral pulses.</p> <p>Auscultate Heart Sounds: Use a stethoscope to auscultate heart sounds, distinguish between normal and abnormal findings (e.g., murmurs, gallops), and associate findings with common cardiovascular conditions.</p> <p>Evaluate Electrocardiograms (ECGs): Record and interpret 12-lead ECGs, recognize normal sinus rhythm and common arrhythmias, and identify ECG signs indicative of cardiac pathologies.</p> <p>This course aims to build foundational competence in clinical examination and diagnostic techniques essential for safe and effective patient care.</p>

Reading List	
No	Textbooks and/or References
1	Perry, A. G., Potter, P. A., & Ostendorf, W. R. Clinical Nursing Skills and Techniques, 10th Edition, Elsevier.
2	Lippincott Williams & Wilkins Manual of IV Therapeutics: Evidence-Based Practice for Infusion Therapy, 7th Edition.
3	Bickley, L. S. Bates' Guide to Physical Examination and History Taking, 13th Edition, Wolters Kluwer.
4	Seidel, H. M., Ball, J. W., Dains, J. E., Flynn, J. A. Mosby's Guide to Physical Examination, 9th Edition, Elsevier.
5	Lilly, L. S. Pathophysiology of Heart Disease: A Collaborative Project of Medical Students and Faculty, 7th Edition, Wolters Kluwer.
6	Levine, M. N., & Harvey, W. P. Clinical Auscultation of the Heart, 2nd Edition.
7	Dubin, D. Rapid Interpretation of EKG's, 6th Edition.
8	Marriott, H. J. L., & Wagner, G. S. Marriott's Practical Electrocardiography, 13th Edition, Wolters Kluwer.

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	IV Injection, Draw Blood, Transfuse	1,2
3	Artery and Vein Examination, Pulses	3,4
3	Auscultation of Heart Sounds	5,6
3	ECG Evaluation	7,8

MED204 Respiratory System and Diseases

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Anatomy	5	5
Clinical Approaches	0	28
Chest Diseases		11
Clinical Evaluation		3
Infectious Diseases		3
Otorhinolaryngology		0
Nuclear Medicine		1
Panel		3
Pediatric		3
Radiology		3
Thoracic Surgery		1
Histology/Embryology	5	8
Microbiology	5	20
Pathology	3	14
Pharmacology	0	11
Physiology	3	14
Professional Skills Practices	4	0
Total	25*	100**

Midterm Results: Overall 50%

Individual assessment weights

***Practical grade: 25%**

The percentage of each module's practical evaluation is shown in the table above.

- **Anatomy, Histology/Embryology and Microbiology:**

The evaluation of the practical will be done during the practical sessions through

- 3) formative evaluations (quizzes, oral exams, assignments, etc.).
- 4) practical exam at the end of the committee.

- **Pathology, Physiology & Professional Skills Practices:**

The evaluation of the practical will be done during the practical sessions through

- 2) formative evaluations (quizzes, oral exams, assignments, etc.).

****Committee Theoretical Exam: 75%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

****Committee Theoretical Exam: 100%**

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Anatomy

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Anatomy	MED204	2024-2025	Spring	4+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Musa Muhtaroglu
E-mail	mmuhtaroglu@eul.edu.tr
Office Hours Schedule	Tuesday 2:00 PM – 4:00 PM, Friday 1:00 PM – 3:00 PM
Phone	05428540684
Office/Room No	CL 102

Course Objectives
<p>The primary objective of this course is to provide students with a comprehensive understanding of the anatomical structures and spatial relationships of the respiratory system. At the end of the course, students are expected to:</p> <ol style="list-style-type: none"> I. Identify the anatomy of the nasal cavity and paranasal sinuses, and explain their functional relevance. II. Describe the structural features of the larynx, trachea, and bronchi in relation to respiration and phonation. III. Understand the composition and organization of the thoracic wall and its role in respiratory mechanics. IV. Recognize the gross anatomy of the lungs, pleura, and mediastinum, and interpret their clinical significance.

Reading List	
No	Textbooks and/or References
1	Drake, R. L., Vogl, A. W., Mitchell, A. W. M. (2023). Gray's Anatomy for Students (5th ed.). Elsevier.
2	Netter, F. H. (2022). Netter Atlas of Human Anatomy: Classic Regional Approach (8th ed.). Elsevier.

3	Paulsen, F., Waschke J. (2023). Sobotta Atlas of Anatomy: English/Latin: General Anatomy and Musculoskeletal System; Internal Organs; Head, Neck and Neuroanatomy (17th ed.). Urban & Fischer
4	Schünke, M., Schulte, E., Schumacher, U. (2020). Atlas of Anatomy, Three Volume Set (3rd ed.). Thieme.
5	Standring, S. (2020). Gray's Anatomy: The Anatomical Basis of Clinical Practice (42nd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Nasal Cavity and Paranasal Sinuses	1-5
1	Larynx, Trachea, and Bronchi	1-5
2	Thoracic Wall	1-5
2	Lungs, Pleura, and Mediastinum	1-5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Nasal Cavity and Paranasal Sinuses	Practical 1
3	Larynx, Trachea, and Bronchi	Practical 2
4	Thoracic Wall	Practical 3
4	Lungs, Pleura, and Mediastinum	Practical 4

Clinical Approaches

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Chest Diseases	Chest Diseases	MED204	2024-2025	Spring	11+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Osama Abuzaina Dr. Gizem Türkeş
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course is designed to provide students with a comprehensive understanding of respiratory system diseases, focusing on clinical presentation, diagnostic methods, and management strategies. By the end of the course, students will be able to:</p> <ul style="list-style-type: none">• Recognize and interpret common signs and symptoms associated with respiratory diseases.• Develop a systematic clinical approach to patients presenting with chest diseases, incorporating history-taking, physical examination, and differential diagnosis.• Understand and apply non-radiological diagnostic methods such as pulmonary function tests, sputum analysis, and laboratory studies in chest diseases.• Describe the pathophysiology, diagnosis, and management of obstructive lung diseases including asthma, bronchiectasis, and chronic obstructive pulmonary disease (COPD).• Analyze the impact of tobacco use on lung health and related diseases.• Diagnose and manage common respiratory infections such as pneumonias and tuberculosis.• Understand the clinical features, diagnosis, and treatment options for sleep apnea syndrome.• Recognize the presentation, diagnostic workup, and therapeutic approaches in lung cancer.

Reading List	
No	Textbooks and/or References
1	Fundamentals of Lung Health and Diseases
2	Pneumonia – TÜSAD Educational Book Series
3	Turkish Thoracic Society Pulmonary Thromboembolism Diagnosis and Treatment Guideline
4	Consensus Report on the Diagnosis and Treatment of Community-Acquired Pneumonia in Adults
5	Republic of Türkiye Ministry of Health – Public Health Directorate Tuberculosis Diagnosis and Treatment Guideline
6	Fundamentals of Lung Health and Diseases – Textbook

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	Signs and Symptoms in the Respiratory System (Dr. Osama Abuzaina)	1-5
2	Approach to the Patient in Chest Diseases (1/2) (Dr. Osama Abuzaina)	5,6
2	Approach to the Patient in Chest Diseases (2/2) (Dr. Osama Abuzaina)	5,6
2	Non-Radiology Diagnosis in Chest Diseases Methods (Dr. Osama Abuzaina)	1-6
3	Obstructive Lung Diseases (1/2): Asthma and Bronchiectasis (Dr. Osama Abuzaina)	1-6
3	Obstructive Lung Diseases (2/2): COPD (Dr. Osama Abuzaina)	1-6
3	Tobacco and Lung Diseases (Dr. Osama Abuzaina)	2,4
3	Pneumonias (Dr. Gizem Türkeş)	1-4
3	Sleep Apnea Syndrome (Dr. Osama Abuzaina)	1,4
3	Tuberculosis (Dr. Gizem Türkeş)	5,6
3	Lung Cancer (Dr. Osama Abuzaina)	1,5

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Clinical Evaluation	Chest Diseases	MED204	2024-2025	Spring	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Gizem Türkeş
E-mail	gizemturkes@gmail.com
Office Hours Schedule	
Phone	+90 533 860 99 35
Office/Room No	

Course Objectives
<p>This course aims to provide medical students with a structured understanding of two clinically significant respiratory conditions: pneumonia and pulmonary embolism. By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> Explain the etiology, pathophysiology, and classification of pneumonia and pulmonary embolism. Identify clinical signs and symptoms, and correlate them with diagnostic findings including laboratory tests and imaging modalities (e.g., chest X-ray, CT angiography, V/Q scan). Evaluate and apply evidence-based management strategies for pneumonia (e.g., antibiotic stewardship, vaccination) and pulmonary embolism (e.g., anticoagulation, thrombolytic therapy). Understand risk factors, complications, and prevention strategies for both conditions. Interpret relevant clinical guidelines to improve diagnostic accuracy and patient outcomes.

Reading List	
No	Textbooks and/or References
1	Fundamentals of Lung Health and Diseases
2	Pneumonia – TÜSAD Educational Book Series
3	Turkish Thoracic Society Guideline for the Diagnosis and Treatment of Pulmonary Thromboembolism

4	Consensus Report on the Diagnosis and Treatment of Community-Acquired Pneumonia in Adults
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WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Pneumonia	1-4
4	Pulmonary Embolism	1-4

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Infectious Diseases	MED204	2024-2025	Spring	16+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	
Phone	+90 533 860 49 88
Office/Room No	ECZ015

Course Objectives
The aim of this course is based on the diagnosis of pathogenic microorganisms that frequently cause infections in the respiratory system using clinical and laboratory methods.

Reading List	
No	Textbooks and/or References
1	Jawetz Melnick & Adelbergs, Medical Microbiology 26/E (Lange Medical Books) 26th Edition
2	Frederick S. Southwick, Infectious Diseases: A Clinical Short Course, 4th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Respiratory Tract Infections in Adults Approach (1/2)	1, 2
4	Respiratory Tract Infections in Adults Approach (2/2)	1, 2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Nuclear Medicine	Nuclear Medicine	MED204	2024-2025	Spring	1+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hülya Efetürk
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course aims to provide an overview of the principles and clinical applications of nuclear medicine techniques in the evaluation of respiratory system disorders. By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> Understand the basic principles of nuclear medicine imaging and radiopharmaceuticals used in respiratory system evaluation. Describe the indications, methodology, and interpretation of common nuclear medicine studies such as ventilation/perfusion (V/Q) scans, pulmonary perfusion scintigraphy, and positron emission tomography (PET). Correlate nuclear imaging findings with clinical and radiologic data in diseases such as pulmonary embolism, lung tumors, inflammatory and infectious lung conditions. Evaluate the advantages, limitations, and radiation safety considerations associated with nuclear medicine in pediatric and adult populations.

Reading List	
No	Textbooks and/or References
1	Ziessman, H. A., O'Malley, J. P., & Thrall, J. H. (2023). Nuclear Medicine: The Requisites (6th ed.). Elsevier.
2	Graham, M. M., Segall, G. M., Zubal, I. G., & Society of Nuclear Medicine and Molecular Imaging. (2019). <i>Nuclear Medicine Procedure Manual</i> (2nd ed.). Springer.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Nuclear Medicine in the Respiratory System	1,2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Panel	Infectious Diseases Pharmacology Chest Diseases Microbiology Pathology Radiology	MED204	2024- 2025	Spring	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Gizem Türkeş
E-mail	gizemturkes@gmail.com
Office Hours Schedule	
Phone	+90 533 860 99 35
Office/Room No	

Course Objectives
<p>This course aims to provide a comprehensive understanding of tuberculosis (TB) from both clinical and public health standpoints. By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> Understand the microbiology, transmission, and global epidemiology of <i>Mycobacterium tuberculosis</i>. Recognize the clinical spectrum of TB, including pulmonary and extrapulmonary forms. Apply diagnostic approaches such as tuberculin skin testing, interferon-gamma release assays, imaging, and microbiological confirmation. Evaluate treatment protocols for drug-sensitive and drug-resistant TB, including first- and second-line therapy. Appreciate the importance of TB control strategies such as contact tracing, vaccination (BCG), screening in high-risk populations, and directly observed therapy (DOT).

Reading List	
No	Textbooks and/or References
1	Republic of Türkiye Ministry of Health – Public Health Directorate Tuberculosis Diagnosis and Treatment Guideline
2	Fundamentals of Lung Health and Diseases – Course Textbook

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Tuberculosis	1, 2
5	Tuberculosis	1, 2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Pediatric	Department Of Child Health And Diseases	MED204	2024-2025	Spring	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hakan Tekgüç
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course aims to equip students with a systematic understanding of the pediatric respiratory system. By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> • Understand the anatomical and physiological differences of the respiratory system in children compared to adults. • Recognize age-specific clinical presentations of respiratory diseases in childhood. • Develop a structured approach to history-taking and physical examination in pediatric patients with respiratory symptoms. • Formulate differential diagnoses and initial management plans for common respiratory conditions such as wheezing, cough, and respiratory distress. • Identify red flag signs requiring urgent intervention or referral to specialized care.

Reading List	
No	Textbooks and/or References
1	Kliegman, R. M., St. Geme, J. W., Blum, N. J., Shah, S. S., Tasker, R. C., & Wilson, K. M. (2023). <i>Nelson Textbook of Pediatrics</i> (21st ed.). Elsevier.
2	Taussig, L. M., & Landau, L. I. (2019). <i>Pediatric Respiratory Medicine</i> (3rd ed.). Elsevier.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Approach to the Respiratory System in Childhood (1/2)	1,2
3	Approach to the Respiratory System in Childhood (2/2)	1,2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Radiology	Radiology	MED204	2024-2025	Spring	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Süha Akpınar
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course provides medical students with the foundational knowledge and interpretive skills necessary for evaluating pediatric respiratory conditions through imaging. By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> • Understand the principles of pediatric chest radiology and age-specific anatomical differences. • Identify normal and abnormal radiographic findings in common childhood respiratory diseases (e.g., pneumonia, bronchiolitis, asthma, foreign body aspiration). • Interpret basic chest X-rays and recognize key radiologic patterns associated with acute and chronic pediatric pulmonary conditions. • Understand the appropriate use and limitations of different imaging modalities (e.g., X-ray, CT, MRI) in the evaluation of the pediatric respiratory system. • Correlate clinical findings with radiologic data to improve diagnostic accuracy and management decisions.

Reading List	
No	Textbooks and/or References
1	Slovits, T. L. (2019). <i>Caffey's Pediatric Diagnostic Imaging</i> (12th ed., Vol. 1–2). Elsevier.
2	Kirks, D. R., & Strife, J. L. (2021). <i>Practical Pediatric Imaging: Diagnostic Radiology of Infants and Children</i> (4th ed.). Wolters Kluwer.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	Respiratory System Radiology (1/2)	1,2
3	Respiratory System Radiology (2/2)	1,2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Thoracic Surgery	Thoracic Surgery	MED204	2024-2025	Spring	1+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Latif Abbasoğlu
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>This course aims to familiarize students with the critical clinical signs, diagnostic findings, and surgical considerations relevant to thoracic surgery. By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> • Identify and interpret key physical examination signs indicative of thoracic pathology, including chest wall deformities, breath sounds, and vascular abnormalities. • Recognize radiological and intraoperative findings commonly encountered in thoracic surgery cases such as lung resections, pleural diseases, and mediastinal masses. • Correlate clinical symptoms and diagnostic data with surgical indications and approaches in thoracic conditions. • Understand postoperative complications and their clinical manifestations in thoracic surgery patients.

Reading List	
No	Textbooks and/or References
1	Locicerco J. et al., (2019), Shied's General Thoracic Surgery, 8 th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Signs and Findings in Thoracic Surgery	1

Histology / Embryology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Histology/Embryology	MED204	2024-2025	Spring	6+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Ayfer FINDIK
E-mail	dr.findik@gmail.com
Office Hours Schedule	
Phone	05488583434
Office/Room No	

Course Objectives
To understand the embryological development and structural differentiation of the pharyngeal complex, facial features, and palate, alongside the formation and histological composition of the respiratory system, including both the upper and lower respiratory tracts and lungs, highlighting their anatomical and functional integration.

Reading List	
No	Textbooks and/or References
1	The Histology Guide, University of Leeds
2	Digital Histology, University of Commonwealth

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Development and Differentiation of the Pharyngeal Complex	1,2
5	Facial and Palate Development (1/2)	1,2
5	Facial and Palate Development (2/2)	1,2
5	Development of the Respiratory System	1,2
5	Histology of the Upper Respiratory Tracts	1,2
5	Lower Respiratory Tracts and Lungs	1,2

PRACTICAL SESSIONS

Week	Practical Topics	Reference No
5	Histology of the Upper Respiratory Tracts (1/2)	1,2
5	Histology of the Upper Respiratory Tracts (2/2)	1,2
5	Histology of Lower Respiratory Tracts and Lung (1/2)	1,2
5	Histology of Lower Respiratory Tracts and Lung (2/2)	1,2

Microbiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Microbiology	MED204	2024-2025	Spring	16+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Emrah Güler
E-mail	eguler@eul.edu.tr
Office Hours Schedule	
Phone	+90 533 860 49 88
Office/Room No	ECZ015

Course Objectives
The aim of this course is to understand the pathogenic microorganisms that cause infection in the Respiratory Tract System (RTS). In addition, it was aimed to learn the characteristic features, pathogenesis, epidemiology, diagnosis and treatment of RTS infections. This course also included the development of students' case management, supported by case evaluations.

Reading List	
No	Textbooks and/or References
1	Jawetz Melnick & Adelbergs, Medical Microbiology 26/E (Lange Medical Books) 26th Edition
2	Frederick S. Southwick, Infectious Diseases: A Clinical Short Course, 4th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	<i>Mycobacterium tuberculosis</i> complex	1, 2
2	Nontuberculous <i>Mycobacteria</i> (NTM) Infections	1, 2
2	<i>Corynebacterium</i> spp.-1	1, 2
2	<i>Corynebacterium</i> spp.-2	1, 2
2	<i>Pseudomonas aeruginosa</i>	1, 2
2	<i>Pseudomonas</i> related non-fermentative gram negative (-) bacteria	1, 2
2	<i>Legionella pneumophila</i>	1, 2

3	<i>Bordetella</i> spp. and <i>Moraxella</i> spp.	1, 2
3	<i>Bacillus</i> spp.-1	1, 2
3	<i>Bacillus</i> spp.-2	1, 2
3	<i>Nocardia</i> and <i>Actinomyces</i>	1, 2
3	Influenza A and B	1, 2
4	Adenoviruses	1, 2
4	Nonsporing anaerobes	1, 2
5	Paramyxoviruses-1	1, 2
5	Paramyxoviruses-2	1, 2

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Examination (Ziehl-Neelsen staining) and Culture of Mycobacteria-1	1, 2
5	Examination (Ziehl-Neelsen staining) and Culture of Mycobacteria-2	1, 2
5	Examination and Culture of Respiratory System Samples-1	1, 2
5	Examination and Culture of Respiratory System Samples-2	1, 2

Pathology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pathology	MED204	2024-2025	Spring	11+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Lema Tavli
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	5391062400
Office/Room No	CL-105

Course Objectives
The main purpose of teaching this subject is to help students understand the normal and pathological states of the structures that make up the respiratory system, as well as the causes, progression, histopathological features, and clinical implications of respiratory diseases. This knowledge is essential for students to recognize and assess common and life-threatening conditions such as lung cancer, asthma, COPD, and pneumonia, to determine appropriate treatment approaches, and to develop strategies for disease prevention.

Reading List	
No	Textbooks and/or References
1	Kumar, V., Abbas, A. K., & Aster, J. C. (2018). <i>Robbins Basic Pathology</i> (10th ed.). Elsevier.
2	West, J. B. (2015). <i>Pulmonary Pathophysiology: The Essentials</i> (9th ed.). Lippincott Williams & Wilkins.
3	Akerman, M. (2001). <i>Pulmonary Pathology</i> . Springer.
4	Fishman, A. P. (2008). <i>Fishman's Pulmonary Diseases and Disorders</i> (4th ed.). McGraw-Hill Education

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Upper Respiratory Pathologies	1-4

1	Pathologies of the Larynx	1-4
2	Obstructive Lung Diseases (1/2)	1-4
2	Obstructive Lung Diseases (2/2)	1-4
2	Pulmonary Vascular Diseases	1-4
3	Interstitial Lung Diseases	1-4
3	Pulmonary Infections	1-4
3	Pleura Diseases	1-4
3	Epithelial Lung Tumors	1-4
4	Neuroendocrine Lung Tumors	1-4
4	Tuberculosis Pathology	1-4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
4	Larynx Pathologies (1/2)	1-4
4	Larynx Pathologies (2/2)	1-4
5	Lung Tumors (1/2)	1-4
5	Lung Tumors (2/2)	1-4

Pharmacology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pharmacology	MED204	2024-2025	Spring	6+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof Dr. Rumeysa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	0533 8806188
Office/Room No	

Course Objectives
The course is to teach students the principles of respiratory system pharmacology and therapeutics. We will focus on the underlying mechanistic bases of respiratory diseases and examine how these relate to therapeutic interventions. Throughout the course, mechanisms, either of disease processes or drug actions are emphasized. In addition, recent developments in the understanding and treatment of respiratory disease will be discussed

Reading List	
No	Textbooks and/or References
1	Rang & Dale's Pharmacology., 10th Ed, 2023, Elsevier Health Sci
2	Bertram Katzung 14th Ed., Basic & Clinical Pharmacology, McGrawHill
3	L, Brunten, et al., Goodman & Gillman Pharmacological Basis of Therapeutics 14th Ed., McGrawHill
4	Joseph DiPiro, et al., 11th Ed, Pharmacotherapy: A Pathophysiological Approach McGrawHill
5	M J Neal., Medical Pharmacology at a Glance 9th Ed, Wiley

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Drugs used in Upper respiratory tract infections	1-2
1	Antitussives, expectorants, Mucolytics, Surfactants	4
3	Antitussives, expectorants, Mucolytics, Surfactants	4
3	Drugs used in Asthma and COPD	3

4	Drugs used in Asthme and COPD	3
4	Drugs used in TB	1,4

Physiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Physiology	MED204	2024-2025	Spring	11+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Nazemin Gürsoy Karaman
E-mail	gursoynazemin@yahoo.com
Office Hours Schedule	
Phone	+905428611721
Office/Room No	

Course Objectives
<p>This course aims to provide a comprehensive understanding of the fundamental physiological mechanisms of the respiratory system. Students will learn about ventilation mechanics, including respiratory muscles and lung compliance, as well as the principles of gas exchange and the transport of oxygen and carbon dioxide. They will explore the neural and chemical control of respiration, focusing on the role of central and peripheral chemoreceptors in regulating breathing according to metabolic demands. Additionally, students will examine physiological and pathophysiological adaptations of the respiratory system in conditions such as high altitude, exercise, and respiratory failure, along with the underlying mechanisms of restrictive and obstructive lung diseases. Furthermore, they will develop an understanding of clinical assessment tools, such as arterial blood gas analysis and pulmonary function tests, and their physiological relevance in diagnosing and managing respiratory disorders.</p>

Reading List	
No	Textbooks and/or References
1	Guyton and Hall Human Physiology
2	Willian Ganong Review of Medical Physiology
3	Susan E. Mulroney- Adam K. Meyers Netters Essential Physiology
4	Vander Human Physiology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to the Respiratory System	1-4
1	Mechanics of Breathing: Lung Volumes and Pressures	1-4

1	Gas Exchange and Diffusion in the Lungs	1-4
1	Oxygen and Carbon Dioxide Transport in Blood	1-4
1	Regulation of Respiration: Neural and Chemical Control	1-4
1	Pulmonary Circulation and Ventilation-Perfusion Relationships	1-4
2	Acid-Base Balance and Respiratory Compensation	1-4
2	Bohr Effect and Haldane Effect in Oxygen Transport	1-4
2	Oxygen-Hemoglobin Dissociation Curve: Mechanisms and Significance	1-4
4	Respiratory Adaptations to High Altitude	1-4
4	Physiological Effects of Diving on the Respiratory System	1-4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
2	Lung Volume Measurement: Spirometry (1/2)	1-2
2	Lung Volume Measurement: Spirometry (2/2)	1-2
4	Pulmonary Function Testing: Methods and Interpretation (1/2)	1-2
4	Pulmonary Function Testing: Methods and Interpretation (2/2)	1-2

Professional Skills Practices

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Professional Skills Practices	MED204	2024-2025	Spring	0+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Gizem Türkeş
E-mail	gizemturkes@gmail.com
Office Hours Schedule	
Phone	+90 533 860 99 35
Office/Room No	

Course Objectives
<p>This course is designed to teach students essential clinical skills for the evaluation of pulmonary diseases, with a focus on tuberculosis screening and lung examination. By the end of the course, students will be able to:</p> <ul style="list-style-type: none">• Perform proper administration and accurate interpretation of the PPD (Purified Protein Derivative) test for tuberculosis screening, including measurement and documentation.• Conduct systematic lung auscultation, identifying normal breath sounds and common abnormal findings (e.g., crackles, wheezes, bronchial breath sounds).• Understand the indications, technique, and interpretation of chest X-rays in the evaluation of pulmonary pathology, particularly in infectious and obstructive lung diseases.• Integrate clinical findings with imaging and test results to support differential diagnosis and initial management strategies.

Reading List	
No	Textbooks and/or References
1	Fundamentals of Lung Health and Diseases

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	PPD Administration/Reading and Lung Sounds Auscultation	1
5	Chest X-ray for Pulmonary Evaluation	1

MED206 Blood-Immune System and Diseases

Committee Modules Evaluations

Course Name	Practical Grade (%)	Midterm and Final Exams: No. of Questions
Biochemistry	6	6
Clinical Approaches	0	22
Clinical Evaluation		1
General Surgery		2
Internal Medicine		9
Medical Genetics		3
Nuclear Medicine		1
Panel		0
Pediatric		6
Histology/Embryology	5	6
Microbiology	5	18
Pathology	2	13
Pharmacology	0	13
Physiology	10	9
Professional Skills Practices	2	0
Total	30*	87**

Midterm Results: Overall 50%

Individual assessment weights

*Practical grade: 30%

The percentage of each module's practical evaluation is shown in the table above.

- **Histology/Embryology, Microbiology and Physiology:**

The evaluation of the practical will be done during the practical sessions through

- 5) formative evaluations (quizzes, oral exams, assignments, etc.).
- 6) practical exam at the end of the committee.

- **Biochemistry, Pathology & Professional Skills Practices:**

The evaluation of the practical will be done during the practical sessions through

- 3) formative evaluations (quizzes, oral exams, assignments, etc.).

**Committee Theoretical Exam: 70%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Final Results: Overall 50%

Individual assessment weights

**Committee Theoretical Exam: 100%

The number of questions for each module is shown in the table above.

The format of the exam questions is multiple-choice with 5 options.

Committee Modules Syllabus

Biochemistry

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Biochemistry	MED206	2024-2025	Spring	6+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To learn about biochemical aspects of erythrocytes and leukocytes. To become familiar with the principles and mechanisms of porphyrin and heme synthesis, heme catabolism and concepts of hyperbilirubinemia. To learn about different types of anemia, hemoglobinopathies, and porphyrias.

Reading List	
No	Textbooks and/or References
1	Essentials of Medical Biochemistry – Eun Ha, C. & Bhagavan, N. V. – Third Edition
2	Textbook of Biochemistry for Medical Students – Vasudevan, D. M., Sreekumari S. & Vaidyanathan K. – Sixth Edition
3	Lecture notes

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Biochemistry of erythrocytes and leukocytes (1/2)	1, 2, 3
1	Biochemistry of erythrocytes and leukocytes (2/2)	1, 2, 3
2	Porphyrin synthesis, heme catabolism and hyperbilirubinemia (1/2)	1, 2, 3
2	Porphyrin synthesis, heme catabolism and hyperbilirubinemia (2/2)	1, 2, 3

3	Anemia, hemoglobinopathies and porphyrias (1/2)	1, 2, 3
3	Anemia, hemoglobinopathies and porphyrias (2/2)	1, 2, 3

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Blood group testing (1/2)	Practical 1
3	Blood group testing (2/2)	Practical 1
4	Complete blood count results interpretation (1/2)	Practical 2
4	Complete blood count results interpretation (2/2)	Practical 2
4	Identifying bilirubin and urobilinogen in urine (1/2)	Practical 3
4	Identifying bilirubin and urobilinogen in urine (2/2)	Practical 3
5	Hemoglobin electrophoresis (1/2)	Practical 4
5	Hemoglobin electrophoresis (2/2)	Practical 4

Clinical Approaches

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Clinical Evaluation	MED206	2024-2025	Spring	1+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Ayşe Sayılı
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>By the end of this lecture, participants will be able to:</p> <ul style="list-style-type: none">• Define anemia and classify it based on red blood cell indices (MCV, MCHC).• Conduct a focused history and physical examination to identify clinical signs and symptoms associated with various types of anemia.• Interpret key laboratory investigations including complete blood count (CBC), reticulocyte count, peripheral blood smear, iron studies, vitamin B12/folate levels, and hemolysis markers• Differentiate between microcytic, normocytic, and macrocytic anemia using a structured diagnostic algorithm.• Identify indications for additional diagnostic tests such as bone marrow biopsy or hemoglobin electrophoresis.• Apply clinical reasoning to construct a differential diagnosis and formulate an initial management plan based on findings.

Reading List	
No	Textbooks and/or References
1	“The Clinical Approach to the Patient with Anemia” (Cambridge Univ Press, 2018). A detailed textbook chapter covering pathophysiology, diagnostic strategy, and management

2	“Anemia: Evaluation and Diagnostic Tests.” Int J Lab Hematol. 2016; review offering a rational diagnostic algorithm—from CBC & red cell indices through reticulocyte count, blood smear, and bone marrow exam
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WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
5	Anemia	1, 2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
General Surgery	General Surgery	MED206	2024-2025	Spring	2+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Latif Abbasoğlu
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> • Describe the fundamental principles, indications, and surgical approaches of organ and tissue transplantation. • Explain the immunological basis of transplantation, including antigen presentation, allorecognition, and graft rejection mechanisms. • Classify types of transplant rejection (hyperacute, acute, chronic) and outline immunosuppressive strategies to prevent rejection. • Discuss the role of histocompatibility testing, donor selection, and ethical/legal considerations in transplantation surgery. • Analyze complications and long-term outcomes in transplant recipients from both surgical and immunological perspectives.

Reading List	
No	Textbooks and/or References
1	Gruessner AC, Dunn DL, Gruessner RG. Transplantation. In: Brunicardi F, Andersen DK, Billiar TR, Dunn DL, Kao LS, Hunter JG, Matthews JB, Pollock RE. eds. Schwartz's Principles of Surgery, 11e. McGraw-Hill Education; 2019.
2	Firth, John D., and others, 'Principles of transplantation immunology', in John Firth, Christopher Conlon, and Timothy Cox (eds), Oxford Textbook of Medicine, 6 edn

	(Oxford, 2020; online edn, Oxford Academic, 1 Jan. 2020), https://doi.org/10.1093/med/9780198746690.003.0044 .
3	Pietra, B.A. (2014). Basic Principles of Transplant Immunology. In: Da Cruz, E., Ivy, D., Jagers, J. (eds) Pediatric and Congenital Cardiology, Cardiac Surgery and Intensive Care. Springer, London. https://doi.org/10.1007/978-1-4471-4619-3_132

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
4	Basic Principles of Transplantation Surgery	1
4	Transplantation Immunology	2, 3

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Internal Medicine	MED206	2024-2025	Spring	9+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Ayşe Sayılı
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>By the end of the course, students will be able to:</p> <p>Perform a systematic clinical and laboratory evaluation of hematologic disorders.</p> <p>Interpret key diagnostic tests including blood smears, marrow biopsies, and coagulation studies.</p> <p>Formulate differential diagnoses and propose initial management strategies for common hematologic conditions.</p>

Reading List	
No	Textbooks and/or References
1	Hamilton & Ozelo. Bleeding Disorders (StatPearls) includes structured frameworks for hematopoietic disease evaluation
2	Bain, B. J. Blood Cells: A Practical Guide, 5th Edition Publisher: Wiley-Blackwell ISBN: 9781118817339
3	Hemolytic anemia in adults – PubMed review: Covers diagnostic algorithms, including blood smear & DAT
4	Hoffbrand, A. V., & Moss, P. A. H. Essential Haematology, 8th Edition Publisher: Wiley-Blackwell
5	PubMed – “Hemolytic anemia in adults: Main causes and diagnostic procedure”: Core review of etiologies and laboratory guidance
6	StatPearls – Megaloblastic Anemia: Pathophysiology and management (B12/folate therapy)
7	StatPearls – Bleeding Disorders: Focus on platelet count, function, and vWD vs. Type 2B differentiation
8	StatPearls – Bleeding Disorders: Coagulation testing (PT, aPTT, INR, mixing studies, factor assays)

9	PubMed – “Splenomegaly: Diagnosis and Management in Adults”: Adult-focused diagnostic approach including imaging and labs
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WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Approach to Hematopoietic Diseases	1
1	Peripheral Blood and Bone Marrow Examination	2
1	Anemia in Adults	3
1	Iron Deficiency Anemia	4
2	Hemolytic Anemia	5
2	Metaplastic Anemia	6
2	Bleeding Disorders (1/2): Thrombocyte Diseases	7
2	Bleeding Disorders (2/2): Clotting Disorders	8
2	Splenomegaly	9

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Medical Genetics	Medical Biology	MED206	2024-2025	Spring	3+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Rasime Kalkan
E-mail	rkalkan@eul.edu.tr
Office Hours Schedule	Monday 14:00-15:00
Phone	054887067888
Office/Room No	CL109

Course Objectives
<p>By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> • Explain the genetic basis of autoimmune diseases, with particular emphasis on HLA haplotypes and other susceptibility genes involved in immune dysregulation. • Describe the molecular and genetic mechanisms of hereditary hemolytic anemias, including hemoglobinopathies (e.g., thalassemia, sickle cell disease), red cell membrane disorders, and enzyme deficiencies. • Evaluate the genetic factors contributing to thrombophilia, including common mutations such as Factor V Leiden and Prothrombin G20210A, and interpret genetic testing results in the context of clinical risk. • Interpret inheritance patterns, molecular diagnostic tools, and genotype-phenotype correlations, and integrate this knowledge into clinical approaches to autoimmune and hematologic diseases.

Reading List	
No	Textbooks and/or References
1	Strachan, T., Lucassen, A., 2022, Genetics and Genomics in Medicine
2	Turnpenny., P.D., et al.,2021, Emery's Elements of Medical Genetics and Genomics
3	Nussbaum, R.A., 2015, Thomson&Thomson, Genetics in Medicine, 8th Edition

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Genetics of Autoimmune Diseases	1,2,3
1	Hereditary Hemolytic Anemias	1,2,3
1	Genetic Approach to Thrombophilia	1,2,3

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Nuclear Medicine	Nuclear Medicine	MED206	2024-2025	Spring	1+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hülya Efetürk
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>By the end of this course/session, students will be able to:</p> <ul style="list-style-type: none"> Describe the principles and clinical applications of nuclear medicine techniques in the diagnosis and management of hematological disorders. Explain the role of radionuclide imaging in evaluating bone marrow activity, splenic function, and hematopoietic malignancies. Interpret common nuclear medicine scans (e.g., PET-CT, bone marrow scintigraphy) used in hematological diseases such as lymphoma, leukemia, and multiple myeloma. Discuss the advantages and limitations of nuclear imaging compared to conventional radiology and laboratory methods in hematology. Evaluate emerging nuclear medicine technologies and radiopharmaceuticals relevant to hematological research and personalized medicine.

Reading List	
No	Textbooks and/or References
1	Mankoff, D. A., Pryma, D. A., & Clark, A. S. (2014). Molecular imaging biomarkers for oncology clinical trials. <i>Journal of Nuclear Medicine</i> , 55(Supplement 2), 118S–126S. https://doi.org/10.2967/jnumed.112.111211
2	Zijlstra, J. M., & Comans, E. F. I. (2016). Role of FDG-PET in hematological malignancies. <i>Cancer Imaging</i> , 16(1), 10. https://doi.org/10.1186/s40644-016-0060-0

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Nuclear Medicine in Hematology	1,2

COURSE DESCRIPTION						
Course	Department	Code	Year	Semester	T+P Hours	Credits
Pediatric	Department Of Child Health And Diseases	MED206	2024-2025	Spring	5+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Dr. Hakan Tekgüç
E-mail	
Office Hours Schedule	
Phone	
Office/Room No	

Course Objectives
<p>By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> • Explain the principles and importance of active immunization, and describe vaccine-preventable diseases in childhood. • Define primary and secondary immune deficiencies, and summarize their clinical features, classifications, and diagnostic approaches. • Describe the development and physiology of the hematopoietic system in children, including age-specific differences. • Identify the causes, classification, and clinical approach to anemia in children, with an emphasis on iron deficiency and hemolytic anemias. • Discuss hemorrhagic diathesis in childhood, including platelet disorders, coagulation factor deficiencies (e.g., hemophilia), and their diagnostic work-up and management.

Reading List	
No	Textbooks and/or References
1	Abbas, A. K., Lichtman, A. H., & Pillai, S. (2022). Basic immunology: Functions and disorders of the immune system (6th ed.). Elsevier. (Covers active immunization and immune deficiencies.)

2	Lanzkowsky, P., Lipton, J. M., & Fish, J. D. (2021). Lanzkowsky's manual of pediatric hematology and oncology (6th ed.). Academic Press. (Comprehensive source for pediatric hematopoiesis, anemia, and bleeding disorders.)
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WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
3	Active Immunization	1,2
3	Definition of Immune Deficiencies and General Features	1,2
3	Hematopoietic System in Children	1,2
5	Anemia in Children	1,2
5	Hemorrhagic Diathesis in Childhood	1,2

Histology / Embryology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Histology/Embryology	MED206	2024-2025	Spring	6+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Ayfer FINDIK PAKROOH
E-mail	dr.findik@gmail.com
Office Hours Schedule	
Phone	05488583434
Office/Room No	

Course Objectives
To understand the composition, function, and development of blood tissue and hematopoiesis, along with the embryological origin, structure, and histology of the lymphoreticular system, highlighting its role in immune response and body defense mechanisms.

Reading List	
No	Textbooks and/or References
1	The Histology Guide, University of Leeds
2	Digital Histology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	Blood Tissue and Hematopoiesis (1/3)	1,2
2	Blood Tissue and Hematopoiesis (2/3)	1,2
2	Blood Tissue and Hematopoiesis (3/3)	1,2
2	Lymphoreticular System and Its Development	1,2
2	Lymphoreticular System Histology (1/2)	1,2
2	Lymphoreticular System Histology (2/2)	1,2

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No

2	Blood Cells and Bone Marrow (1/2)	1,2
2	Blood Cells and Bone Marrow (2/2)	1,2
2	Lymphoreticular System (1/2)	1,2
2	Lymphoreticular System (2/2)	1,2

Microbiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Microbiology	MED206	2024-2025	Spring	17 + 4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Osman Dadaş
E-mail	odadas@eul.edu.tr
Office Hours Schedule	
Phone	2736
Office/Room No	ECZ016

Course Objectives
To learn about how the immune system works. To become familiar with the cells and organs of the immune system. To become familiar with the concepts of innate and adaptive immune system mechanisms. To learn about the functions of the different immune cells, antibodies and the complement system. To become familiar with the concepts of active, passive immunity and vaccination. To learn about retroviruses and oncoviruses. To become familiar with anti-viral activities of interferons and several drugs. To become familiar with the concepts of antigen-antibody reactions and several antigen-antibody reaction based laboratory techniques.

Reading List	
No	Textbooks and/or References
1	Abbas, A. K., Lichtman, A. H. & Pillai S. Cellular and Molecular Immunology. 9th Edition.
2	Actor J. K. Introductory Immunology. 3rd Edition.
3	Lecture notes
4	
5	

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Organization of the immune system	1, 2, 3
1	Cells and organs playing a role in immunity	1, 2, 3

1	Cellular immunity	1, 2, 3
1	Humoral immune response and antibodies	1, 2, 3
2	Innate immunity	1, 2, 3
2	Complement system	1, 2, 3
2	Antigen – antibody reactions	1, 2, 3
2	Coombs tests	1, 2, 3
3	Active and passive immunity (1/2)	1, 2, 3
3	Active and passive immunity (2/2)	1, 2, 3
3	Immunological tolerance and autoimmunity	1, 2, 3
3	Hypersensitivity reactions	1, 2, 3
4	Retroviruses (HIV I and II) (1/2)	1, 2, 3
4	Retroviruses /HIV I and II) (2/2)	1, 2, 3
4	Retroviruses (HTLV I and II)	1, 2, 3
4	Tumor viruses	1, 2, 3
5	Anti-viral drugs and interferons	1, 2, 3

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Antigen – antibody reactions (1/2)	2, 3
5	Antigen – antibody reactions (2/2)	2, 3
5	Coombs tests (1/2)	3
5	Coombs tests (2/2)	3

Pathology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pathology	MED206	2024-2025	Spring	12+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Lema Tavlı
E-mail	ltavli@eul.edu.tr
Office Hours Schedule	
Phone	5391062400
Office/Room No	CL-109

Course Objectives
The study of the blood-immune system and its diseases is fundamental for medical students as it provides essential knowledge about how the body defends itself against infections and maintains homeostasis. Understanding the pathophysiology of blood disorders and immune-related diseases enables future physicians to diagnose, manage, and treat a wide range of clinical conditions, including anemia, leukemias, immunodeficiencies, and autoimmune diseases. This foundation is critical for developing a holistic approach to patient care and advancing in various medical specialties.

Reading List	
No	Textbooks and/or References
1	Kumar V, Abbas AK, Aster JC. <i>Robbins Temel Patoloji</i> . 10. Baskı. Çeviri editörü: Güngör Z. İstanbul: Nobel Tıp Kitabevleri; 2018. s. 183-195.
2	Akkerman N. <i>Patoloji</i> . 6. Baskı. İstanbul: Palme Yayıncılık; 2020. s. 155-172.
3	Kumar V, Abbas AK, Aster JC. <i>Robbins Temel Patoloji</i> . 10. Baskı. Çeviri editörü: Güngör Z. İstanbul: Nobel Tıp Kitabevleri; 2018. Bölüm 12, Hematopoetik Sistem – Lösemiler ve Lenfomalar; s. 452-488.
4	Akkerman N. <i>Patoloji</i> . 6. Baskı. İstanbul: Palme Yayıncılık; 2020. Bölüm 9, Eritrosit Bozuklukları ve Anemiler; s. 298-322.
5	Kumar V, Abbas AK, Aster JC. <i>Robbins Temel Patoloji</i> . 10. Baskı. Çeviri editörü: Güngör Z. İstanbul: Nobel Tıp Kitabevleri; 2018. Bölüm 14, Dalak ve Timus Hastalıkları – Lenfoid Organların Patolojisi; s. 505-515.

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
2	Pathogenesis of Hypersensitivity Reactions (1/2)	1,2
2	Pathogenesis of Hypersensitivity Reactions (2/2)	1,2,3
3	Pathogenesis of Autoimmune Diseases (1/2)	1,2,3
3	Pathogenesis of Autoimmune Diseases (2/2)	1,2,4
3	Transplant Rejection	1,2,3,4
3	Anemias	1,2,3,4
4	Anemias	1,2,3,4
4	Non-Neoplastic Diseases of White Blood Cells (1/2)	1,2,3,4
4	Non-Neoplastic Diseases of White Blood Cells (2/2)	1,2,3,4
4	Neoplastic Diseases of White Blood Cells (1/2)	1,2,3,4
5	Neoplastic Diseases of White Blood Cells (2/2)	1,2,3,4
5	Spleen and Thymus Diseases	1,2,3,4,5

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
5	Non-Neoplastic Diseases of White Blood Cells (1/2)	1,2,3,4
5	Non-Neoplastic Diseases of White Blood Cells (2/2)	1,2,3,4
5	Neoplastic Diseases of White Blood Cells (1/2)	1,2,3,5
5	Neoplastic Diseases of White Blood Cells (2/2)	1,2,3,5

Pharmacology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Pharmacology	MED206	2024-2025	Spring	12+0	-

Course Language
English

Course Lecturer Details	
Name & Surname	Prof Dr. Rumeysa Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	0533 8806188
Office/Room No	

Course Objectives
The course is to teach students the principles of hematology and immune system pharmacology and therapeutics. We will focus on the underlying mechanistic bases of hematologic and immunologic diseases and examine how these relate to therapeutic interventions. Throughout the course, mechanisms, either of disease processes or drug actions are emphasized. In addition, recent developments in the understanding and treatment of hematologic and immunologic diseases will be discussed

Reading List	
No	Textbooks and/or References
1	Rang & Dale's Pharmacology., 10th Ed, 2023, Elsevier Health Sci
2	Bertram Katzung 14th Ed., Basic & Clinical Pharmacology, McGrawHill
3	L, Brunten, et al., Goodman & Gillman Pharmacological Basis of Therapeutics 14th Ed., McGrawHill
4	Joseph DiPiro, et al., 11th Ed, Pharmacotherapy: A Pathophysiological Approach McGrawHill
5	M J Neal., Medical Pharmacology at a Glance 9th Ed, Wiley

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Immunomodulators	1-2
1	Immunomodulators	1-2
1	Disinfectants and Antiseptics	1-4

1	Hemostatic Drugs	1-4
3	Antiviral Drugs	1-4
3	Antianaemic Drugs	1-4
3	Antianaemic Drugs	1-4
3	Antithrombotics (antiplatelet and anticoagulant drugs)	1-4
3	Antithrombotics (antiplatelet and anticoagulant drugs)	1-4
3	Drugs Used in Oncology	1-4
5	Drugs Used in Oncology	1-4
5	Drugs Used in Oncology	1-4

Physiology

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Physiology	MED206	2024-2025	Spring	9+8	-

Course Language
English

Course Lecturer Details	
Name & Surname	Nazemin Gürsoy Karaman
E-mail	gursoynazeminahoo.com
Office Hours Schedule	
Phone	05428611721
Office/Room No	-

Course Objectives
The aim of this course is to provide second-year medical students with a comprehensive understanding of the physiological principles related to blood. Throughout the course, students will learn about the composition and functions of blood, including the roles of red blood cells, white blood cells, platelets, and plasma. The course will cover the processes of hematopoiesis, oxygen transport, immune responses, and hemostasis, as well as the regulation of these systems under normal and pathological conditions. Students will also gain the ability to interpret basic hematological laboratory results and correlate physiological mechanisms with common clinical conditions such as anemia, leukemia, and coagulation disorders. Emphasis will be placed on integrating theoretical knowledge with clinical reasoning through case-based learning and problem-solving activities, preparing students for further studies in clinical medicine.

Reading List	
No	Textbooks and/or References
1	Guyton and Hall Human Physiology
2	Willian Ganong Review of Medical Physiology
3	Susan E. Mulroney- Adam K. Meyers Netters Essential Physiology
4	Vander Human Physiology

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introduction to Blood Physiology and Functions	1-4
1	Plasma Composition and Plasma Proteins	1-4
2	Red Blood Cells: Structure, Function, and Life Cycle	1-4

2	Hemoglobin and Oxygen Transport Mechanisms	1-4
3	Hematopoiesis: Blood Cell Formation and Regulation	1-4
3	White Blood Cells and the Immune Response	1-4
4	Platelets and the Physiology of Hemostasis	1-4
4	Coagulation Cascade and Anticoagulant Mechanisms	1-4
4	Clinical Correlations: Anemia, Leukemia, and Hemostatic Disorders	1-4

PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
3	Microscopic Examination of Peripheral Blood Smear	1-4
3	Hemoglobin Concentration Measurement	1-4
3	Determination of Hematocrit (Packed Cell Volume)	1-4
3	Estimation of Red Blood Cell Count using Hemocytometer	1-4
4	Estimation of White Blood Cell Count using Hemocytometer	1-4
4	Platelet Count and Interpretation	1-4
4	Determination of Blood Group (ABO and Rh Typing)	1-4
4	Clotting Time and Bleeding Time Tests	1-4

Professional Skills Practices

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Professional Skills Practices	MED206	2024-2025	Spring	0+4	-

Course Language
English

Course Lecturer Details	
Name & Surname	Asst. Prof. Dr. Tuğba Kartal Dr. Ayşe Sayılı
E-mail	tkartal@eul.edu.tr
Office Hours Schedule	Tuesday 9:00-12:00
Phone	05057494451
Office/Room No	2562

Course Objectives
The objective of this course is to equip students with the knowledge and skills required to accurately measure body temperature and administer subcutaneous and intradermal injections in a safe and competent manner.

Reading List	
No	Textbooks and/or References
1	Elkin, M. K., Perry, A. G., & Potter, P. A. (2004). Nursing Interventions & Clinical Skills.
2	Boyd, C. (2014). Study skills for nurses. John Wiley & Sons.
3	Taylor, N. A., Tipton, M. J., & Kenny, G. P. (2014). Considerations for the measurement of core, skin and mean body temperatures. Journal of thermal biology, 46, 72-101.
4	Doyle, G. R., & McCutcheon, J. A. (2015). 7.3 Intradermal and subcutaneous injections. Clinical procedures for safer patient care.
5	Perry, A. G., Potter, P. A., Ostendorf, W. R., & Laplante, N. (2021). Clinical Nursing Skills and Techniques-E-Book: Clinical Nursing Skills and Techniques-E-Book. Elsevier Health Sciences.
6	Bain, B.J. Diagnosis from the blood smear. New England Journal of Medicine, 2005;353(5):498–507. A comprehensive overview of smear-making techniques and morphological interpretation

7	Rodak's Hematology: Clinical Principles and Applications (Keohane EM, Smith LJ, Walenga JM): Standard chapter on preparing, staining, and evaluating peripheral blood smears
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PRACTICAL SESSIONS		
Week	Practical Topics	Reference No
2	Temperature Measurement (Asst. Prof. Dr. Tuğba Kartal)	1, 2, 3
2	Subcutaneous and Intradermal Injection (Asst. Prof. Dr. Tuğba Kartal)	1, 2, 4, 5
5	Peripheral Smear Preparation and Evaluation (1/2) (Dr. Ayşe Sayılı)	6, 7
5	Peripheral Smear Preparation and Evaluation (2/2) (Dr. Ayşe Sayılı)	6, 7

Electives Syllabus

Research Project III

COURSE DESCRIPTION					
Course	Code	Year	Semester	T+P Hours	Credit
Research Project III	MED208	2024-2025	Spring	28	2

Course Language
English

Course Lecturer Details	
Name & Surname	Prof. Dr. Rümeyza Demirdamar
E-mail	rdemirdamar@eul.edu.tr
Office Hours Schedule	
Phone	2802
Office/Room No	

Exam Evaluation	
Midterm Report	50%
Final Report: Poster Presentation	50%

Course Objectives
1) To show how should be the format and how to make the layout of the poster. 2) To highlight where the students can find the sources/references for the poster. 3) To teach why the referencing/plagiarism is important in the poster. 4) To teach how the poster presentation should be.

Reading List	
No	Textbooks and/or References
1	Papers related to the topics

WEEKLY LECTURE CONTENTS		
Week	Lecture Topics	Reference No
1	Introducing the scientific poster	1
2	Deciding the topic and title of the poster	1
3	Scientific sources/papers	1
4	Referencing style for the posters	1

5	How to write an abstract	1
6	How to write the main body	1
7	How to arrange/organize the poster on the powerpoint	1
8	Midterm Exam	
9	Self-Study to prepare the poster and discussion with the supervisor-Draft 1	1
10	Self-Study to prepare the poster and discussion with the supervisor-Draft 2	1
11	Self-Study to prepare the poster and discussion with the supervisor-Draft 3	1
12	Self-Study to prepare the poster and discussion with the supervisor-Draft 4	1
13	Finalizing the poster	1
14	Oral Presentation	1

Occupational Health & Safety in Medicine

EUROPEAN UNIVERSITY OF LEFKE								
Faculty of Medicine								
SYLLABUS								
2024-2025 Spring Semester								
Course Code	Course Name	Course Type	Weekly Course Hours			Credits	ECTS	Weekly Time Schedule
			T	A	L			
MED212	Occupational Health and Safety in Medicine		2	0	0	2	3	Monday 9:00-11:00
Prerequisite								
Course Lecturer	Asst. Prof. Dr. Macide ARTAC OZDAL							
E-mail	mozdal@eul.edu.tr							
Phone	00906602000 (2561)							
Teaching Assistant(s)								
E-mail	-							
Course Objectives	To provide knowledge health, social determinants of health and health risks. To learn major concepts and principles of occupational health and medicine. To help students gain knowledge on the measures for controlling occupational hazards and accidents. To provide knowledge on the management of occupational health and safety systems. To provide students inside into the fundamentals of occupational health and safety regulations in healthcare organizations.							
Learning Outcomes	The course aims to provide knowledge on: LO1: The health and wellness dimensions LO2: The public health, social determinants of health and risk factors LO3: The principles of occupational health and occupational medicine LO4: The occupational accidents and occupational (or work-related) diseases LO5: The functions and components of occupational health services LO6: The principles of management of occupational health and safety LO7: Prevention and control of occupational diseases and injuries							
Textbooks and/or References	1	International Commission on Occupational Health (2014). International Code of Ethics For Occupational Health Professionals						
	2	Tadesse T & Admassu M (2006). Occupational Health and Safety. The Ethiopia Ministry of Health and The Ethiopia Ministry of Education						
	3	Artac Ozdal, M. MED212 Occupational Health and Safety in Medicine Lecture Notes, European University of Lefke						
	4							
WEEK	Date	TOPICS					Reference No - Section	
Week 1	10-14.02.2025	Introduction - Terminology, definitions of health and wellness					Ref 3	

Week 2	17-21.02.2025	Introduction to Public Health and Social Determinants of Health and Risk Factors	Ref 3			
Week 3	24-28.02.2025	Introduction to and History of Occupational Health and Safety	Ref 1 and Ref 2			
Week 4	03-07.03.2025	Occupational Health , International Organizations and Regulations and Legal Framework	Ref 2			
Week 5	10-14.03.2025	Work environment and Recognition of Occupational Health and Safety Hazards	Ref 2			
Week 6	17-21.03.2025	The Occupational Accidents	Ref 2 and Ref 3			
Week 7	24-28.03.2025	Occupational (or work-related) Diseases	Ref 2 and Ref 3			
Week 8	31.03-04.04.2025	Public Holiday				
Week 9	07-11.04.2025	The functions and components of occupational health services / Occupational Medicine	Ref 2 and Ref 3			
Week 10	14-18.04.2025	Midterm Exams	Ref 3			
Week 11	21-25.04.2025	The Principles of Occupational Health and Safety Management	Ref 2 and Ref 3			
Week 12	28.04.02.05.2025	Prevention and Control of Occupational Diseases and Injuries	Ref 2 and Ref 3			
Week 13	05-09.05.2025	Occupational Hazards in Health Care Organizations	Red 3			
Week 14	12-16.05.2025	Occupational Health and Safety Measures and Regulations in Health Care Organizations	Ref 3			
Week 15	19-22.05.2025	Occupational Health and Safety Measures and Regulations in Health Care Organizations	Ref 3			
Week 16	23.05-02.06.2025	Final Exam				
Evaluation Tools	Evaluation Tool	Quantity	Date	Weight in Total (%)	Weight in Semester Evaluation (%)	
	Final	1			40%	
	Midterm	1			40%	
	Presentation					
	Assignment					
	Report					
	Quiz	1			20%	
	Other					
*** Lifelong Learning Programme (LLP) ***				Language of Instruction:		
Evaluation Tool	Quantity	Student Workload Hours		Evaluation Tool	Quantity	Student Workload Hours
Theoretical Hours	12	12*2=24		Applied Hours		
Self Study Hours	12	12*2=24		Final	1	1*20=20
Quiz				Project		

Midterm	1	1*15=15		Homework		
Atelier				Seminar		
Field Study				Presentation		
Other				Self Study		
TOTAL :						83.0
Recommended ECTS Credit (Total Hours / 25) :						3

Language Syllabus

Turkish IV

COURSE TEACHING PLAN	
Course Name	TURKISH
Course Code	MED 210
Course Type	Compulsory
Course Level	Undergraduate
Course ECTS Credit	2
Weekly Course Hours	2
Weekly Practice Hours	0
Weekly Laboratory Hours	0
Year of the Course	2024-2025
Semester of the Course	SPRING
Course Lecturer(s)	Naziyet Mercan Bozok
Teaching System	Formal Education
Medium of Instruction	English & Turkish
Prerequisite Courses	None
Other Aspects Recommended for the Course	None
Apprenticeship	None
Aim of the Course	The aim of the course is to enable students to understand, apply and evaluate the methods, techniques and principles used in teaching Turkish as a foreign language.
Learning Outcomes	1. Comprehends the basic phonetic and structural features of Turkish.
	2. Applies the pronunciation features of Turkish.
	3. Acquires the basic vocabulary of Turkish.
	4. Develops Turkish text reading skills.
	5. Can use Turkish dialogues that are frequently used in daily life.
Course Content	The methods used in teaching Turkish as a foreign language will be given theoretically and practically. Developing the four basic skills, planning teaching activities in advance, learning from simple to complex, from concrete to

	abstract, using visual and auditory tools, using the mother tongue when necessary, presenting one structure at a time, ensuring that the given information is transferred to daily life, ensuring that students participate in the lesson more effectively, taking individual differences into account, motivating and encouraging students.
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Weekly Detailed Course Content	week 1	Zaman mekan: geçmiş,şimdi ,gelecek / zaman planlanması/Farklı şehirler,farklı hayatlar
	week 2	Farklı şehirler,farklı hayatlar -dan önce, -dan sonra, -madan önce, -dıktan sonra
	week 3	Sağlıklı Yaşam:Dünyamız Kirleniyor,Trafik Canavarı, -pekiştirme, gibi,kadar
	week 4	Sağlıklı Yaşam:Dünyamız Kirleniyor,Trafik Canavarı, -pekiştirme, gibi,kadar
	week 5	Sosyal Etkinlikler:Okumayı Seviyorum, Hangi filme gidelim,Spor yap zinde kal, Geniş zaman(-ır/-ar/-r), -ca, -a göre,bu yüzden.bu sebeple,belki,hem,ne,ya ister
	week 6	Sosyal Etkinlikler:Okumayı Seviyorum, Hangi filme gidelim,Spor yap zinde kal, Geniş zaman(-ır/-ar/-r), -ca, -a göre,bu yüzden.bu sebeple,belki,hem,ne,ya ister
	week 7	Güzel Ülkem:Her Yer Tarih, 4 Mevsim 7 bölge, Tatlı yeylim tatlı konuşalım,-ma,-mak,-iş, Dolaylı Anlatım:emir kipi
	week 8	Mid-Term Exam
	week 9	Üretimden tüketime: İş yemeği, Alışveriş, -(y)ıp,-madan,-(y)arak,-(y)a
	week 10	Üretimden tüketime: İş yemeği, Alışveriş, -(y)ıp,-madan,-(y)arak,-(y)a
	week 11	Duygular: Mektup Yazalım,Mutlu olmak,Gülelim eğlenelim,-(y)abil
	week 12	Teknoloji ve İletişim: Elektrikli ev eşyaları,Büyülü cam TV, Bitkiler,Hayvanlar ve Biz,-mak için-mak üzere,-diye sormak,-diye cevap vermek
	week 13	Teknoloji ve İletişim: Elektrikli ev eşyaları,Büyülü cam TV, Bitkiler,Hayvanlar ve Biz,-mak için-mak üzere,-diye sormak,-diye cevap vermek
	week 14	İnsan ve Toplum: Kişilik tipleri,Başarının anahtarı elimde,Empati kuruyorum,-an,-en,Genel Tekrar
	week 15	Final Exam

Course Book/Material/Suggested Resources	Yunus Emre Enstitüsü / A1 düzeyi Türkçe kitapları
	Kurtuluş Öztopçu. Elementary Turkish. İstanbul, 2006.
	Yunus Emre Enstitüsü / A2 düzeyi Türkçe kitapları
	Doğan Günay, Özdan Fidan ve diğerleri, Yabancılar İçin Türkçe Ders Kitabı + Alıştırma Kitabı, Papatya Yay., Ankara: 2013.
	Halitoğlu, V. (2024). A flipped-classroom model in teaching Turkish as a foreign language and student opinions regarding the lesson. International Online Journal of Educational Sciences, 12(1), 67-87.
	Tekman, T. K., & Yeniasır, M. (2024). THE IMPORTANCE OF TARGET LEARNERS IN TEACHING FOUR BASIC LANGUAGE SKILLS IN TURKISH. Conhecimento & Diversidade, 16(43), 562-580.