COURSE INFORMATON					
Course Title	*Code*	*Phase/Semester*	*L+P Hour*	*Credits*	*ECTS*
Basic Medical Sciences	MED 203		-	-	53

Prerequisites	Phase 1/Semester 1-2 MED 104 Introduction to Basic Medical Sciences MED 102 Introduction to Clinical Practice I MED 103 Anatomical Drawing

Language of Instruction	English
Course Level	First Cycle, (Bachelor of Science), Undergraduate, Directive 2005/36/EC; "Regulated Profession" (Exempt from EQF Level Scheme)
Course Type	Compulsory Professional (Knowledge and Skills: physiopathological processes, pathological processes; introduction to clinical practice-advanced clinical skills)
Course Coordinators	**COORDINATION COMMITTEE** **(TEACHING YEAR 2019 – 2020)** Burcu GEMİCİ BAŞOL, PhD Assoc. Prof. (Coordinator) Deniz KIRAÇ, PhD Assoc. Prof. (Co-Coordinator) Alev CUMBUL, PhD Assist. Prof. (Co-Coordinator) Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof. (Co-Coordinator) Mohammed ELGAZZAR, MD Lecturer (Co-Coordinator) **ICP-II COORDINATION COMMITTEE** Özlem TANRIÖVER, MD MPH Prof. A. Arzu AKALIN, MD Assist. Prof. (Co-Coordinator) **COMMITTEE COORDINATION** COMMITTEE I - CARDIOVASCULAR SYSTEM Coordination Committee HEAD: Bayram Yılmaz, PhD Prof. SECRETARY:Alev Cumbul, Assist. Prof. MEMBER: Mehtap KAÇAR, MD, PhD, Assoc. Prof. MEMBER :Akif MAHARRAMOV, PhD, Assist. Prof
Instructors	COMMITTEE II - RESPIRATORY SYSTEM Coordination Committee HEAD: Mehtap KAÇAR, MD, PhD, Assoc. Prof. SECRETARY: Burcu GEMİCİ BAŞOL, PhD. Assoc.Prof. MEMBER: Çağatay ACUNER, MD. Assoc. Prof. MEMBER : Deniz YAT KIRAÇ, PhD. Assist. Prof. COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM Coordination Committee HEAD: İnci ÖZDEN, Ph.D. Prof. SECRETARY Mohammed ELGAZZAR, MD Lecturer MEMBER: Mehtap KAÇAR, MD. Ph.D. Assoc. Prof. MEMBER : Aikaterini PANTELİ, MD, Lecturer

COMMITTEE IV - NERVOUS SYSTEM
Coordination Committee
HEAD: Bayram YILMAZ, PhD Prof.
SECRETARY Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof
MEMBER: Mehtap KAÇAR, MD. Ph.D. Assoc. Prof.
MEMBER : Deniz KIRAÇ, PhD Assoc. Prof.

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS
Coordination Committee
HEAD: Bayram YILMAZ, PhD Prof.
SECRETARY Deniz KIRAÇ, PhD Assoc. Prof.
MEMBER: Mehtap KAÇAR, MD. Ph.D. Assoc. Prof.
MEMBER : Aikaterini PANTELİ, MD, Lecturer

Course Components:

COMMITTEE I - CARDIOVASCULAR SYSTEM
ANATOMY
Aikaterini PANTELİ, MD, Lecturer

BIOCHEMISTRY
İnci ÖZDEN, PhD Prof.

BIOPHYSICS
Akif MAHARRAMOV, Assist. Prof.

BIOSTATISTICS
E. Çiğdem ALTUNOK, PhD, Assist. Prof.

HISTOLOGY & EMBRYOLOGY
Aylin YABA UÇAR, PhD, Assoc. Prof.

Alev CUMBUL, PhD, Assist. Prof.

IMMUNOLOGY
Gülderen YANIKKAYA DEMİREL, MD, PhD, Prof.

MEDICAL BIOLOGY
Turgay İSBİR, PhD, Prof.
Deniz KIRAÇ, PhD, Assoc. Prof.

MEDICAL MICROBIOLOGY
Çağatay ACUNER, MD, Assoc. Prof.
PATOLOGY
Aydın SAV, MD, Prof.

PHYSIOLOGY
Bayram YILMAZ, PhD, Prof.
Mehtap KAÇAR, MD PhD, Assoc. Prof.
Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof.

SCIENTIFIC RESEARCH AND PROJECT COURSE-II
Bayram YILMAZ, PhD, Prof.
Deniz KIRAÇ, PhD, Assoc. Prof.

INTRODUCTION TO CLINICAL PRACTICE- II
Özlem TANRIÖVER, MD, MPH, Prof.
A. Arzu AKALIN, MD, Assist. Prof.
Serdar ÖZDEMİR, MD, PhD, Assist. Prof.

COMMITTEE II - RESPIRATORY SYSTEM

ANATOMY
Aikaterini PANTELİ, MD, Lecturer

BIOPHYSICS
Akif MAHARRAMOV, Assist. Prof.

BIOSTATISTICS
E. Çiğdem ALTUNOK, PhD, Assist. Prof.

HISTOLOGY & EMBRYOLOGY
Aylin YABA UÇAR, PhD, Assoc. Prof.
Alev CUMBUL, PhD, Assist. Prof.

IMMUNOLOGY
Gülderen YANIKKAYA DEMİREL, MD, PhD, Prof.

MEDICAL GENETIC
Ömer Faruk BAYRAK, PhD Prof.

MEDICAL MICROBIOLOGY
İbrahim Çağatay ACUNER, MD. Assoc. Prof.

PATOLOGY
Aydın SAV, MD, Prof.

PHYSIOLOGY
Bayram YILMAZ, PhD, Prof.
Mehtap KAÇAR, MD PhD, Assoc. Prof.
Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof.

SCIENTIFIC RESEARCH AND PROJECT COURSE-II
Bayram YILMAZ, PhD, Prof.
Deniz KIRAÇ, PhD, Assoc. Prof.

INTRODUCTION TO CLINICAL PRACTICE- II
Özlem TANRIÖVER, MD, MPH, Prof.
A. Arzu AKALIN, MD, Assist. Prof.
Barış Murat AYVACI, MD, Assist. Prof.
Eren GÖKDAĞ, MD.
Fatma Tuğba COŞKUN, MD.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

ANATOMY
Mohammed ELGAZZAR, MD Lecturer

BIOCHEMISTRY
İnci ÖZDEN, MD Prof

BIOPHYSICS
Akif MAHARRAMOV, PhD Assist. Prof.

BIOSTATISTICS
E. Çiğdem ALTUNOK, PhD, Assist. Prof.

HISTOLOGY & EMBRYOLOGY
Aylin YABA UÇAR, PhD, Assoc. Prof.
Alev CUMBUL, PhD, Assist. Prof.

IMMUNOLOGY
Gülderen YANIKKAYA DEMİREL, MD, PhD, Prof.

MEDICAL BIOLOGY
Soner DOĞAN, PhD Assoc. Prof.

MEDICAL MICROBIOLOGY
Çağatay ACUNER, MD Assoc. Prof.

PATOLOGY
Aydın SAV, MD, Prof.

PHYSIOLOGY
Bayram YILMAZ, PhD, Prof.
Mehtap KAÇAR, MD PhD, Assoc. Prof.
Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof.

SCIENTIFIC RESEARCH AND PROJECT COURSE-II
Bayram YILMAZ, PhD, Prof.
Deniz KIRAÇ, PhD, Assoc. Prof.

COMMITTEE IV - NERVOUS SYSTEM

ANATOMY
Aikaterini PANTELİ, MD, Lecturer

BIOCHEMISTRY
İnci ÖZDEN, PhD Prof

BIOPHYSICS
Akif MAHARRAMOV, Assist. Prof.

MEDICAL MICROBIOLOGY
Çağatay ACUNER, MD Assoc. Prof.

PHARMACOLOGY
Ece GENÇ, PhD Prof.
Emine Nur ÖZDAMAR, MD, Assist. Prof.

PHYSIOLOGY
Bayram YILMAZ, PhD, Prof.
Mehtap KAÇAR, MD PhD, Assoc. Prof.
Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof.

SCIENTIFIC RESEARCH AND PROJECT COURSE-II
Bayram YILMAZ, PhD, Prof.
Deniz KIRAÇ, PhD, Assoc. Prof.

INTRODUCTION TO CLINICAL PRACTICE- II
Özlem TANRIÖVER, MD MPH. Prof.
A. Arzu AKALIN, MD Assist. Prof.
Pınar TÜRE, MD Assist. Prof.
Alp KAYIRAN, MD
Fatma Tuğba COŞKUN, MD

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS

ANATOMY
Mohammed ELGAZZAR, MD Lecturer

BIOCHEMISTRY
İnci ÖZDEN, PhD Prof.

BIOPHYSICS
Bilge GÜVENÇ TUNA, PhD Assist. Prof.

BIOSTATISTIC
E. Çiğdem ALTUNOK, PhD Assist. Prof.

HISTOLOGY & EMBRYOLOGY
Aylin YABA UÇAR, PhD Assoc. Prof.
Alev CUMBUL, PhD Assist. Prof.

	IMMUNOLOGY Gülderen YANIKKAYA DEMİREL, MD, PhD, Prof. MEDICAL BIOLOGY Turgay İSBİR, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof. MEDICAL MICROBIOLOGY Çağatay ACUNER, MD Assoc. Prof. PATOLOGY Aydın SAV, MD, Prof. PHARMACOLOGY Ece GENÇ, PhD Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof. PHYSIOLOGY Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD PhD, Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof. SCIENTIFIC RESEARCH AND PROJECT COURSE-II Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof. INTRODUCTION TO CLINICAL PRACTICE- II Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Murat KURU, MD Assist. Prof. Serdar ÖZDEMİR, MD Assist. Prof. Mustafa YAZICIOĞLU MD Assist. Prof. Alp KAYIRAN, MD. Ertan EMEK, MD, Ceyhun CENK, MD,
Assistants	Selvi Duman, Biologist, M.Sc., Laboratory Technician Yasin Delibaş, Laboratory Technician Sinem Ethemoğlu, M.Sc. PhD Student, Laboratory Technician Sami Ağuş, M.Sc. PhD Student, Laboratory Technician Özge Başer, M.Sc. PhD Student, Laboratory Technician Buğra Özgün PhD Student Laboratory Technician Cihan Süleyman Erdoğan PhD Student, Laboratory Technician
Goals	**In evidence based manner,**; 1. ***To*** convey knowledge on biophysical, biological, anatomical, embryological, histological, physiological, biochemical, microbiological and immunological conditions of systems, 2. ***To convey*** introductory information on tissue damage and neoplasis related to systems, 3. ***To convey*** basic knowledge at the introductory level for clinics**,** ~~4.~~ ***To equip with*** basic clinical skills (interventional or non-interventional) required for the practice of medical profession~~,~~ **5.** ***To equip with*** skills for scientific project preparation**.**
Content	**Course Components:** COMMITTEE I Cardiovascular System (6 weeks) COMMITTEE II Respiratory System (6 weeks) COMMITTEE III Gastrointestinal System (7 weeks) COMMITTEE IV Nervous System (8 weeks) COMMITTEE V Endocrine and Urogenital Systems (8 weeks)

Learning Outcomes Graduate should be able to	**Program Outcomes**	**Teaching Methods**	**Assessment Methods**
1.0. ***explain*** basic medical knowledge for cardiovascular system, respiratory system, circulation, hemodynamics, urogenital system, gastrointestinal system, nervous system, endocrine system, immune system and immunologic response, biostatistics subjects***.***	1	1, 6	A
2.0. ***explain*** the operational principles, interactions and relation of the systems in the body***.***	1	1, 6	A
3.0. of clinical conditions; 3.1. ***explain*** mechanisms of damages formed at molecular, cell, tissue, organ, system and multi-system level*,* 3.2. ***describe*** the structural changes caused*,* 3.3. ***list*** developmental progress in time.	1	1, 6	A
4.0. Among factors that pose risk –to individual and community health; 4.1. ***list*** biological agents*,* 4.2. ***explain*** their mechanisms of action and outcomes***.***	1	1, 6	A
5.0. ***explain*** basic principles of evidence-based medicine applications***.***	1	1, 6	A
6.0. ***describe*** writing, reporting, presentation and submission to publication phases of a research project***.***	1	1, 6	A

Teaching/Learning Methods:	• **CONTACT HOURS (CH)** 1. Theoretical-Class/Auditorium/Conference Hall/Multimedia 1.1. Lecture/Tutorial 1.2. Case report 1.3. Case presentation 1.4. Research seminar 1.5. Seminar 1.6. Student seminar/Journal club 1.7. Invited speaker 1.8. Hospital conference 1.9. Online/Distance or e-learning (paper based or ICT based) 1.10. Other: 2. Theoretical-Group Activity/Interactive 2.1. Case discussion 2.2. Discussion class 2.3. Small group study session/Problem solving session/Brainstorm session 2.4. Exercise class 2.5. Oral presentation and criticism 2.6. Panel 2.7. Workshop 2.8. Online/Distance or e-learning (paper based or ICT based) 2.9. Other: 3. Practice Based-Laboratory/Class 3.1. Demonstration class 3.2. Laboratory teaching

	3.3. Clinical skills laboratory 3.4. Small group study session/Problem solving session 3.5. Exercise class 3.6. Workshop (practical class) 3.7. Other: 4. Clerkship (Clinical practice and training) 4.1. Field study/Fieldwork 4.2. Outpatient clinic 4.3. Patient bedside 4.4. Imaging round 4.5. Laboratory round 4.6. Work based practice 4.7. Grand round 4.8. Operating room 4.9. Invasive Intervention room 4.10. Night shift at ward 4.11. Night shift at intensive care unit 4.12. Night shift at emergency care unit 4.13. Other: 5. Work placement/Internship (Clinical performance under supervision) 5.1. Field study/Fieldwork 5.2. Outpatient clinic 5.3. Patient bedside 5.4. Imaging round 5.5. Laboratory round 5.6. Work based practice 5.7. Grand round 5.8. Operating room 5.9. Invasive intervention room 5.10. Night shift at ward 5.11. Night shift at intensive care unit 5.12. Night shift at emergency care unit 5.13. Other: • **INDEPENDENT STUDY HOURS (ISH)** 6. KNOWLEDGE (Levels: Knowledge, Comprehension, Application, Analysis, Synthesis, Evaluation) 6.1. Theoretical/Written/Oral exam/s 6.2. Presentation 6.3. Seminar 6.4. Discussion 6.5. Session 6.6. Research paper writing 6.7. Project writing 6.8. Report writing 6.9. Dissertation writing 6.10. Homework 6.11. Investigation/Survey study 6.12. Other: 7. SKILLS: (Levels: Imitation, Manipulation, Precision, Articulation, Naturalization) 7.1. Oral/practical exam/s 7.2. Presentation 7.3. Seminar 7.4. Discussion 7.5. Session 7.6. Exercise 7.7. Workshop 7.8. Imaging round 7.9. Laboratory round 7.10. Grand round 7.11. Other: 8. ATTITUDES (Receiving, Responding, Valuing, Organization, Characterization) 8.1. Questionnaire (self-assessment) 8.2. Paper case 8.3. Other: 9. COMPETENCY (Doing/Making, Co-ordinating/Operating, Observing/Analysing/Listening to/ Controlling/Driving, Choosing/Communicating/Enhancing, Conceiving/Visioning/Foreseeing)

	9.1. Portfolio preparation 9.2. Clinical performance at outpatient wards 9.3. Clinical performance at inpatient wards 9.4. Clinical performance at night shifts (ward, emergency care unit, intensive care unit) 9.5. Other: (e.g. mini-clinical exam, etc.) 10. PROFICIENCY (Doing/Making, Co-ordinating/Operating, Observing/Analysing/Listening to/ Controlling/Driving, Choosing/Communicating/Enhancing, Conceiving/Visioning/Foreseeing) 10.1. Portfolio preparation 10.2. Clinical performance at outpatient wards 10.3. Clinical performance at inpatient wards 10.4. Clinical performance at night shifts (ward, emergency care unit, intensive care unit) 10.5. Other: (e.g. mini-clinical exam, etc.)
Assessment Methods:	A. Knowledge Assessment a. Written Exam (MCQ+EMQ+KFQ) (F, S) b. Objectively Structured Oral Examination (S) c. Oral Examination (F) d. Other: B. Skills Assessment a. Practical Examination (F) b. Objectively Structured Practical Examination (S) c. Mini Clinical Examination (S) d. Other: C. Attitude Assessment a. Mini Clinical Examination (S) b. Questionnaire (self-assessment) (F) c. Paper case (S) d. Observation of behaviour (360^0) (F, S) e. Other: D. Competency Assessment a. Mini Clinical Examination (S) b. Clerkship/Internship Guide/Checklist Assessment (F, S) c. Professional Portfolio Assessment (F) d. Presentation Performance Assessment (F) e. Seminar Performance Assessment (F) f. Project Writing Assessment (S) g. Other: E. Proficiency Assessment a. Mini Clinical Examination (S) b. Clerkship/Internship Guide/Checklist Assessment (F, S) c. Professional Portfolio Assessment (F) d. Presentation Performance Assessment (F) e. Seminar Performance Assessment (F) f. Other: *F: Formative, S: Summative

COURSE CONTENT

For Detailed information:
https://med.yeditepe.edu.tr/sites/default/files/phase_2_apk_2019_16.12.2019_baski_0.pdf

Week	Topics	Study Materials
1-6	Committee I: Cardiovascular System	Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specifically designed phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials
7	Committee Exam	

8-13	Committee II: Respiratory System	Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specifically designed phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials
14	Committee Exam	
15-21	Committee III: Gastrointestinal System	Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specifically designed phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials
22-23	Committee Exam-Mid Term Break	
24-31	Committee IV : Nervous System	Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specifically designed phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials
32	Committee Exam	
33-40	Committee V: Endocrine and Urogenital Systems	Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos, Specifically designed phantoms, Medical and laboratory devices, Medical and non-medical consumables, Practice materials
41	Committee Exam	
45	Final Exam	
49	Incomplete Exam	

RECOMMENDED SOURCES	
Textbooks	• Guyton and Hall - Textbook of Medical Physiology • Glantz, Stanton “A Primer of Biostatistics” McGrow-Hill , NewYork, 2002 • Armitage, P., “ Statistical Methods in Medical Research” Blackwell Science, Oxford,2002 • B. G. Katzung: Basic and Clinical Pharmacology, 12th ed. McGraw-Hill Companies, New York, 2012. • Goodman&Gilman’s The Pharmacologic Basis of Therapeutics, 12th ed.McGraw Hill Medical, 2011
Additional Resources	• Each instructor will provide her/his notes to the students

MATERIAL SHARING	
Documents	Textbooks, Lecture presentations, Course notes, Checklists, Laboratory Practice Manuals, Videos
Assignments	
Exams	After the exam; exam questions, question discussions, individual performance analysis reports

ASSESSMENTS

Assessments table will be made with consideration of each learning objective for each committee and will be announced and explained in introductory lectures at the beginning of each committee.

Scores Information	
CS	The committee score is based on various question types/nu and/or assessment tools (MCQ, SbMCQ or Checklists). Please see the committee's assessment matrix table/page fo specifications. Contribution of student's performance during PBL sessi CSs of Committee I, II, III, and V is **5%.**
CMS	= Average of CSs
ICPS	= (OSCE 1 %45)+(OSCE2 %45)+(ECE %10)
ECSs	= Score information is shown pages of Elective Courses in the APB.
SRPCS	= Score information is shown pages of Scientific Research and Project Co APB
FES	= Final Exam Score
ICES	= Incomplete Exam Score
TS *for students, who are exempted from FE*	= 98% of CMS + 2% of SRPCS
TS *for students, who are not exempted from FE*	= 98% of (60% of CMS + 40% of FES or ICES) + 2% of SRPCS

Pass or Fail Calculations of the Courses	
Basic Medical Sciences (BMS) II (MED 203)	
Pass; *TS* ***≥ 50*** ***Fail;*** *FES* ***< 50*** *(barrier point), ICES* ***< 50*** *(barrier point), or/and TS* ***< 50*** *The student is exempted from FE, if the CMS is* ***≥ 75*** *and all CSs are* ***≥ 50*** *The FE and ICE barrier point is not applied to the students whose all CSs are* ***≥ 50***	
Introduction to Clinical Practise (ICP) II (MED 202)	
Pass; *ICPS* ***≥ 50*** ***Fail;*** *ICPS* ***< 50***	
Elective Courses	

Pass; *ECSs* ***≥ 50*** ***Fail;*** *ECSs* ***< 50***	

COURSE CATEGORY
Professional (Knowledge and Skills: physiopathological processes, pathological processes; introduction to clinical practice-advanced clinical skills)

COURSE'S CONTRIBUTION TO PROGRAM

Program Learning Outcomes (APK)	Contribution				
	1	**2**	**3**	**4**	**5**
1.1.		X			
1.5.			X		
2.1.		X			
2.2.			X		
2.3.		X			
2.4.		X			
2.5		X			

ECTS CREDITS **MED 201 Basic Medical Sciences II**			
ACTIVITIES	#	Time (hour)	Workload (hour)
Lectures	569	1	569
Laboratory Practices	124	1	124
Scientific Project Writing	1	14	14
Independent Study for Mid-term Exam	429	1	429
Mid-term Exam (MCQ+OSPE)	9	2	18
Independent Study for Final Exam	429	1	429
Final Exam (MCQ)	1	4	4
Scientific Research and Publications Course Exam	1	1	1
Total Workload per Course			1590
ECTS Credits per Course			53