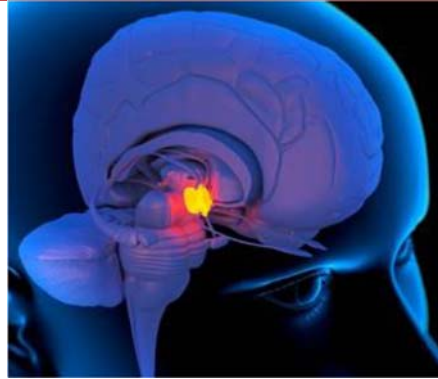




**MARMARA UNIVERSITY – EASTERN MEDITERRANEAN UNIVERSITY  
INTERNATIONAL MEDICAL SCHOOL**



**GROWTH, DEVELOPMENT, MENTAL HEALTH AND RELATED DISORDERS  
YEAR 3 COURSE 4  
March 02 – April 16, 2020**

**Year 3 Coordinators**

Prof., Arzu Akşit İLKI & Assoc. Prof., Pinar Mega TİBER & Assist. Prof., İlke AKÇAY

**Module Coordinator**

Prof., Özlem SARIKAYA  
Inst. Dr. Duygu GENÇALP

**Introduction to Clinician Skills (ICS)  
Coordinators**

Prof., Pemra ÜNALAN  
Assoc. Prof., Nilüfer GÜZOĞLU

**Coordinator of Clinical Skill Lab.**

Prof., Pemra ÜNALAN  
Assist. Prof., Bülent SEZGİN

**Coordinator of ICS Res. Lab.**

Prof., Pemra ÜNALAN  
Inst. Dr. Özge EKER

**Coordinator of Multidisciplinary Students' Lab.**

Assoc. Prof., Betül KARADEMİR  
Assist. Prof., Mümtaz GÜRAN

**Coordinator of Assessment Unite**

Assist. Prof., Cevdet NACAR  
Assist. Prof., H. Eren SAKALLI

**Vice-Chief Coordinators**

**Assessment**

Assist. Prof., Cevdet NACAR  
Assist. Prof., H. Eren SAKALLI

**Student Affairs**

Assist. Prof., Can ERZİK  
Inst. Yöner Meray

**Chief Coordinator**

Assoc. Prof., Hasan YANANLI  
Assist. Prof., Mümtaz GÜRAN

**Coordinator of Medical Education Program  
Evaluation and Development Commission**

Prof., Berrak Ç. YEĞEN

**Educational Consultant**

Assoc. Prof., Mehmet Ali GÜLPINAR

**Dean (EMU)**

Assoc. Prof., Emre HAMURTEKİN

**Dean (MU)**

Prof., Hakan GÜNDÜZ

## LEARNING OUTCOMES / COMPETENCIES

- A. **Clinical Care: Qualified patient care and community oriented health care**
  - 1. Basic clinical skills
  - 2. The organization and management of the patient and the patient care
  - 3. The organization and the management of health care delivery services / system
  - 4. Health promotion and disease prevention
- B. **Medical Knowledge and Evidence-Based Medicine**
  - 5. Appropriate information retrieval and management skills
  - 6. The integration of knowledge, critical thinking and evidence-based decision making
  - 7. Scientific methods and basic research skills
- C. **Professional Attitudes and Values**
  - 8. Communication skills and effective communication with patients / patient relatives
  - 9. Interpersonal relationships and team working
  - 10. Ethical and professional values, responsibilities
  - 11. Individual, social and cultural values and responsibilities
  - 12. Reflective practice and continuing development
  - 13. Healthcare delivery systems, management and community oriented health care
  - 14. Education and counseling

### PHASE-1 LEARNING OBJECTIVES

- 1. Understanding the normal structures and functions of human body
- 2. Correlating the basic concepts and principles to each other that define health and disease; applying basic concepts and principles to health and disease conditions
- 3. Developing clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge
- 4. Gaining basic clinical skills by applications in simulated settings.
- 5. Awareness of the professional values in health and disease processes (professional, individual, societal) and acquisition necessary related skills
- 6. Evaluating critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values
- 7. Acquisition skills in reflective thinking and practicing, being open to continuous individual / professional development.

### PHASES – 1 THEMA/ORGAN SYSTEM-BASED COURSE PROGRAMS

Year 1, Course 1: Introduction to Cell and Cellular Replication

Year 1, Course 2: Cellular Metabolism and Transport

Year 1, Course 3: Development and Organization of Human Body

Year 1, Course 4: Introduction to Nervous System and Human Behavior

Year 2, Course 1: Cell and Tissue Injury I

Year 2, Course 2: Cell and Tissue Injury II

Year 2, Course 3: Hematopoietic System and Related Disorders

Year 2, Course 4: Musculoskeletal, Integumentary Systems and Related Disorders

Year 2, Course 5: Respiratory System and Related Disorders

Year 3, Course 1: Cardiovascular System and Related Disorders

Year 3, Course 2: Gastrointestinal System, Metabolism and Related Disorders

Year 3, Course 3: Nervous System and Related Disorders

### **Year 3, Course 4: Growth, Development, Mental Health and Related Disorders**

Year 3, Course 5: Urinary and Reproductive System and Related Disorders

## GROWTH, DEVELOPMENT, MENTAL HEALTH AND RELATED DISORDERS

### AIM and LEARNING OBJECTIVES of COURSE

**Aim:** At the end of this committee, third year students will gain knowledge about the structure, functions and the pathogenesis of the disorders related to endocrine system. During this committee students will gain a comprehensive view on the health problems of the certain periods of human life cycle such as childhood, adolescents and elderly with a specific emphasis on the growth, development and mental health. They will also gain knowledge about the signs and symptoms of endocrine disorders, psychiatric disorders, related risk factors, prevention, diagnosis and principles of treatment.

**Learning Objectives:** At the end of this course, third year students will,

**review the development, histology and structure of the endocrine system,**

- understand the principles of endocrine homeostasis and hormone action, define the pathologic processes in endocrine and mental disorders,
- get knowledge about growth, development and monitoring in childhood,
- gain knowledge about the risk factors and preventive measures related to endocrine and mental disorders,
- gain knowledge about the major signs and symptoms of endocrine and mental disorders, explain the main determinants of health,
- explain the importance and the effects of social, environmental and life style factors on mental and physical health,
- gain knowledge about the approach to diagnosis and principles of treatment in endocrine and mental disorders.

#### ASSESSMENT SYSTEM

**Module examination:** Written exam at the end of module (10 % of final score)  
**Practical examination:** Practical exams at the end of course  
**Course examination:** Written exam at the end of course

#### PROGRAM EVALUATION

Evaluation at the end of the course, is done both orally and by using structured evaluation forms

#### DEPARTMENTS PARTICIPATING IN COURSE-3.4

- Anatomy
- Biochemistry
- Child and Adolescent Psychiatry
- Family Medicine
- Histology and Embryology
- Internal Medicine
- Medical Genetics
- Nuclear Medicine

- Pathology
- Pediatrics
- Pharmacology
- Physiology
- Psychiatry
- Public Health
- Radiology

### LECTURERS / TUTORS

Alper Yıldırım, Assoc. Prof., Physiology  
Ahmet Arman, Professor, Medical Genetics  
Ahmet Topuzođlu, Professor, Public Health  
Amber Eker Bakkalođlu, Assoc. Prof., Neurology  
Atıla Karaalp, Professor, Pharmacology  
Axel Würz, Instructor, Psychiatry  
Aymelek Yalın, Professor, Anatomy  
Ayşe Burcu Ataz, Assoc. Prof, Child and Adolescent Psychiatry  
Berfu Çerçi Öngün, Instructor, Anatomy  
Beste Melek Atasoy, Professor, Internal Medicine  
Bülent Sezgin, Assist. Prof., Internal Medicine  
Cemal Gürkan, Instructor, Forensic Sciences  
Cihan Tüccar, Inst., Clinical Skills  
Didem Rıfki, Inst., Clinical Skills  
Dilek Gogas Yavuz, Professor, Internal Medicine  
Dilşad Save, Professor, Public Health  
Emine Özerinç, Instructor, Turkish Language  
Filiz Onat, Professor, Pharmacology  
Goncagül Haklar, Professor of Biochemistry  
Halil Eren Sakallı, Assist. Prof, Pharmacology  
Hande Tuğcan, Inst., Indian Dance  
Hızır Kurtel, Professor, Physiology  
Huriye Nursel Elçiođlu, Professor, Pediatrics  
Hülya Gözü, Professor, Internal Medicine  
İlke Akçay, Assist. Prof, Biostatistics  
İlter Güney, Assoc. Prof, Medical Genetics

Masoud Afshani, Assist. Prof, Histology and Embryology  
Mesut Yıldız, Assoc. Prof, Psychiatry  
Nahide Gökçora, Professor, Nuclear Medicine  
Nevin Yılmaz, Prof., Internal Medicine/ Gastroenterology  
Nilüfer Güzođlu, Assoc. Prof., Neonatology  
Nimet Emel Lüleci, Professor, Public Health  
Nurtane Karagil, Instructor, Arts and Crafts  
Onur Buğdaycı, Assist. Prof., Radiology  
Özge Eker, Inst., Molecular Biology and Genetics  
Önder Şirikçi, Prof., Biochemistry  
Özlem Sarıkaya, Professor of Medical Education  
Özlem Tuğçe Kaya, Instructor, Histology and Embryology  
Özlem Üstay, Assoc. Prof, Internal Medicine  
Pelin Bağcı, Prof., Pathology  
Saime Batirel, Assoc. Prof, Medical Biochemistry  
Serap Çifçili, Professor, Family Medicine  
Tülay Güran, Professor, Pediatrics  
Volkan Topçuođlu, Professor, Psychiatry  
Yasemin Kurtođlu, Inst., Aerial Fitness  
Yaşar İnci Alican, Professor, Physiology  
Yıldız Akvardar, Professor, Psychiatry  
Zafer Gören, Professor, Pharmacology  
Zeliha Leyla Cinel, Professor, Pathology

### READING / STUDYING MATERIALS

- Williams Textbook of Endocrinology. 10th ed./P.Reed Larsen. et al.
- Joslin's Diabetes Mellitus. 14th ed./ Edited by C. Ronald Kahn et al.
- Kaplan & Sadock's Comprehensive Textbook of Psychiatry. Editors, Benjamin J.,Sadock, Virginia A. Sadock.
- Nelson Textbook of Pediatrics.17th ed./Richard E. Behrman, Robert M. Kliegman, Hal B. Jenson.
- Basic Pathology. Vinay Kumar, Ramzi S. Cotran, Stanley L. Robbins.
- Color Textbook of Histology. Leslie P. Gartner, James L. Hiatt
- Histology and Cell Biology: An Introduction to Pathology. Abraham L.Kierszenbaum
- Clinical Pharmacology. D.R. Laurence, P.N. Bennet, M.J. Brown Clinical Anatomy for Medical Students. Richard S. Snell Textbook of Medical Physiology. Arthur C. Guyton, John E. Hall

<b>SUMMARY OF THE COURSE 3.4</b>			
<b>Discipline</b>	<b>Lecture &amp; Group Discussion</b>	<b>Multidisciplinary Lab. &amp; Clinical Skills Lab. Practice</b>	<b>Total</b>
Anatomy	1	1	2
Biochemistry	12		12
Child and Adolescent Psychiatry	5		5
Family Medicine	4		4
Histology and Embryology	4	2	6
Internal Medicine	17		17
Medical Genetics	4		4
Nuclear Medicine	1		1
Pathology	6	1	7
Pediatrics	11		11
Pharmacology	13		13
Physiology	12		12
Psychiatry	20		20
Public Health	12		12
Radiology	1		1
<b>Subtotal</b>	<b>123</b>	<b>4</b>	<b>127</b>
<b>PBL Module</b>	8		8
<b>ICS-3: Basic Medical Practices, Clinical Skills Lab.</b>		28	28
Turkish for Medical Students - IV	26		26
Turkish for Medical Students – IV <b>(Interactive Session)</b>		7	
<b>Elective Course</b>	8		8
<b>TOTAL</b>	<b>165</b>	<b>39</b>	<b>204</b>

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	THEORETICAL AND PRACTICAL SESSIONS	LECTURER/TUTOR
<b>WEEK 1 (March 02-06, 2020)</b>		
<b>Monday</b>	<b>March 02</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>14:40-15:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>15:40-16:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
	Elective Course-III (Turkish Students) MDCN181 – Th. and Applied Forensic Sciences MDCN182 – Art & Craft for Medicine Students MDCN186 – Modern Indian Dance Course MDCN187 – Aerial Fitness & High Int. Interval Tr.	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu
<b>16:40-17:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
	Elective Course-III (Turkish Students) MDCN181 – Th. and Applied Forensic Sciences MDCN182 – Art & Craft for Medicine Students MDCN186 – Modern Indian Dance Course MDCN187 – Aerial Fitness & High Int. Interval Tr.	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu
<b>Tuesday</b>	<b>March 03</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	Introduction to the course	Dr. İlke Akçay
<b>10:40-11:30</b>	Thyroid and parathyroid glands	Dr. Aymelek Yalın
<b>11:40-12:30</b>	<b>Anatomy LAB:</b> Thyroid and parathyroid glands	Dr. Aymelek Yalın Dr. Befe Çerçi Öngün
<b>13:40-14:30</b>	Hypothalamus and the growth hormone	Dr. Alper Yıldırım
<b>14:40-15:30</b>	Hypothalamus and the growth hormone	Dr. Alper Yıldırım
<b>15:40-16:30</b>	Adrenal medullary hormones	Dr. Alper Yıldırım
<b>16:40-17:30</b>		
<b>Wednesday</b>	<b>March 04</b>	
<b>08:40-09:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>09:40-10:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>10:40-11:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>11:40-12:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>13:40-14:30</b>	Biosynthesis and metabolism of thyroid hormones	Dr. Goncağül Haklar

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<b>14:40-15:30</b>	Biosynthesis and metabolism of thyroid hormones	Dr. Goncagül Haklar
<b>15:40-16:30</b>	Endocrine function of pancreas	Dr. Goncagül Haklar
<b>16:40-17:30</b>	Endocrine function of pancreas	Dr. Goncagül Haklar
<b>Thursday</b>	<b>March 05</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	Pharmacotherapy of disorders of calcium metabolism	Dr. Eren Sakallı
<b>10:40-11:30</b>	Endemic goiter	Dr. Nimet Emel Lüleci
<b>11:40-12:30</b>	Turkish for Medical Students – IV ( <b>Interactive Session</b> )	Inst. Emine Özerinç
<b>13:40-14:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>14:40-15:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>15:40-16:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>16:40-17:30</b>	STUDY TIME	
<b>Friday</b>	<b>March 06</b>	
<b>08:40-09:30</b>	ICS-3: Polyclinic Visits	Dr. Bülent Sezgin Dr. Didem Rıfki Dr. Cihan Tüccar Ins. Emine Özerinç
<b>09:40-10:30</b>	ICS-3: Polyclinic Visits	
<b>10:40-11:30</b>	ICS-3: Polyclinic Visits	
<b>11:40-12:30</b>	ICS-3: Polyclinic Visits	
<b>13:40-14:30</b>	ICS-3: Polyclinic Visits	Dr. Bülent Sezgin Dr. Didem Rıfki Dr. Cihan Tüccar Ins. Emine Özerinç
<b>14:40-15:30</b>	ICS-3: Polyclinic Visits	
<b>15:40-16:30</b>	ICS-3: Polyclinic Visits	
<b>16:40-17:30</b>	ICS-3: Polyclinic Visits	
<b>WEEK 2 (March 09-13, 2020)</b>		
<b>Monday</b>	<b>March 09</b>	
<b>08:40-09:30</b>	ICS-3 Research: Data analysis	Dr. İlke Akçay, Dr. Özge Eker
<b>09:40-10:30</b>	ICS-3 Research: Data analysis	Dr. İlke Akçay, Dr. Özge Eker
<b>10:40-11:30</b>	ICS-3 Research: Data analysis	Dr. İlke Akçay, Dr. Özge Eker
<b>11:40-12:30</b>	ICS-3 Research: Data analysis	Dr. İlke Akçay, Dr. Özge Eker
<b>13:40-14:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>14:40-15:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>15:40-16:30</b>	Turkish for Medical Students - IV	Inst. Emine Özerinç
	Elective Course-III (Turkish Students) MDCN181 – Th. and Applied Forensic Sciences MDCN182 – Art & Craft for Medicine Students MDCN186 – Modern Indian Dance Course MDCN187 – Aerial Fitness & High Int. Interval Tr.	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu

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	Turkish for Medical Students - IV	Inst. Emine Özerinç
<b>16:40-17:30</b>	Elective Course-III (Turkish Students) MDCN181 – Th. and Applied Forensic Sciences MDCN182 – Art & Craft for Medicine Students MDCN186 – Modern Indian Dance Course MDCN187 – Aerial Fitness & High Int. Interval Tr.	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu
<b>Tuesday</b>	<b>March 10</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	Genetic disorders of thyroid and parathyroid glands	Dr. Ahmet İlter Güney
<b>10:40-11:30</b>	Genetic basis of diabetes mellitus	Dr. Ahmet İlter Güney
<b>11:40-12:30</b>	Genetic basis of sexual differentiation	Dr. Ahmet İlter Güney

**Kovid-19 pandemisi sebebiyle 10 Mart 2020 tarihinden itibaren sınıfta eğitime ara verilmiştir ve uzaktan eğitim yoluyla devam edilmektedir.**

**Due to the Covid-19 pandemic, education in classrooms has been suspended and continues through distance learning.**

<https://medicine.emu.edu.tr/en/students/current-students/committees/distance-learning-time-table>