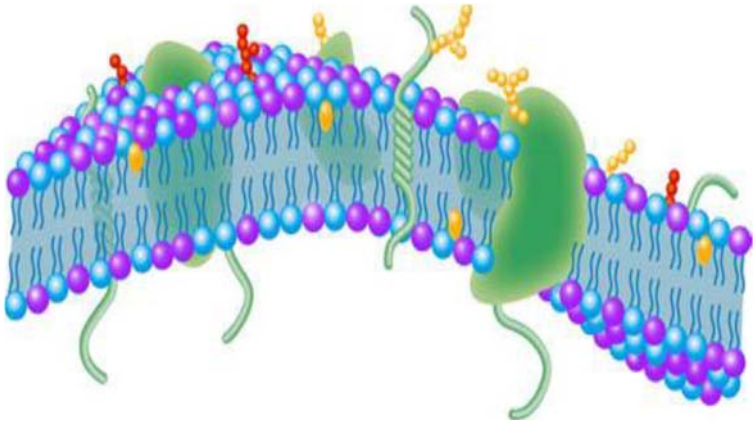
Last updated on Dec. 19, 2018

MARMARA UNIVERSITY – EASTERN MEDITERRANEAN UNIVERSITY
INTERNATIONAL MEDICAL SCHOOL



CELLULAR METABOLISM AND TRANSPORT COURSE
Year 1 Course 2
November 26, 2018 – January 11 , 2019

Coordinator of the Course 1.2 Prof., Mustafa AKKİPRİK & Assoc. Prof., Dilek AKAKIN & Assist. Prof., Ergül MUTLU ALTUNDAĞ	
Module Coordinator Assoc. Prof., Özlem SARIKAYA & Inst.Dr., Berfu Çerçi ÖNGÜN	**Introduction to Clinician Skills (ICS) Coordinators** Assoc. Prof., Pemra ÜNALAN & Assist. Prof. Dr.,Bülent SEZGIN
Coordinator of Clinical Skill Lab. Assoc. Prof., Pemra ÜNALAN & Assist. Prof. Dr., Bülent SEZGIN	**Coordinator of ICS Res. Lab.** Prof., Sibel SAKARYA & Assist. Prof., İlke AKÇAY
Coordinator of Multidiciplinary Students' Lab. Assoc. Prof., Betül KARADEMİR & Assist. Prof., Mümtaz GÜRAN	**Cooordinator of Assessment Unite** Assist. Prof., Cevdet NACAR & Assist. Prof., Hasan TOPER & Assist. Prof., & Assist. Prof., H. Eren SAKALLI., Assist. Prof.,Masoud AFSHANİ
Vice-Chief Coordinators	
Assessment Assist. Prof., Cevdet NACAR & Assist. Prof., Mümtaz GÜRAN	**Students' Affairs** Assist. Prof., Can ERZİK & Assist. Prof., İlke AKÇAY& Assist. Prof., Mümtaz GÜRAN
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) Prof., Nahide GÖKÇORA	**Dean (MU)** Prof., Hakan GÜNDÜZ

LEARNING OUTOMES / 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 healthcare
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 : Growth, Development, Mental and Endocrine Disorders

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

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Cellular Metabolism and Transport

AIM and LEARNING OBJECTIVES of COURSE

Aim: At the end of this committee, first year students will gain knowledge about the metabolic pathways within the cell, structure of the cell membrane and transport mechanisms.

Learning Objectives: At the end of this committee, students will,

1. acquire knowledge related to structural characteristics, functions and regulation of enzymes and coenzymes
2. understand the ATP synthesis and its effect on metabolic pathways
3. describe the constituents and reactions of metabolic pathways within the cell
4. understand membrane structure and its function, physical principles of transport and signaling mechanisms both within and among the cells
5. acquire skills necessary to perform experimental applications.

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-1 & MODULE-2

- Biochemistry
- Biophysics
- Physiology
- Medical Biology
- Biostatistics

LECTURERS / TUTORS

Alper YILDIRIM, Assist. Prof., Physiology
Aydın KARAKUZU, Prof., General Surgery
Ayfer CİVİSİLLİ, Instructor, Medical English
Ayşe KOZANSOY, Instructor, Medical English
Berfu Çerçi ÖNGÜN, Instructor Dr., Anatomy
Berrak YEĞEN, Prof., Physiology
Betül KARADEMİR, Assoc. Prof., Medical Biochemistry
Bülent SEZGİN, Assist. Prof., Internal Medicine
Cemal GÜRKAN, Instructor, Forensic Sciences
Cevdet NACAR, Assist. Prof., Biophysics
Duygu Gençalp, Inst. ,Biochemistry
Ergül Mutlu ALTUNDAĞ, Assist. Prof., Medical Biochemistry
Goncagül Haklar, Prof., Medical Biochemistry
Günseli Ayşe Garip İNHAN, Assoc. Prof., Biophysics
Hülya CABADAK, Assoc. Prof., Biophysics
Ilke AKÇAY, Assist. Prof., Biostatistics
Mümtaz GÜRAN, Assist. Prof., Microbiology
Nevber İSTİLLOZLU, Instructor, Turkish Language
Nurtane KARAGİL, Instructor, Arts and Crafts
Özge Cumaoğulları Eker, Instructor Dr., Medical Genetics
Özgür KASIMAY, Assoc. Prof., Physiology
Saime BATIREL, Assist. Prof., Biochemistry
Şerife Çelebi SÖNMEZ, Instructor, Turkish Language
Şükrü TÜZMEN, Assoc. Prof., Medical Biology
Turgay Bülent GÖKTÜRK, Assist. Prof., Atatürk's Principles and History of Modern Turkey
Yaşar İnci ALİCAN, Prof., Physiology

READING / STUDYING MATERIALS

- Biochemistry, Stryer, 4th Ed., Freeman
- Biochemistry, Zubay, 3rd Ed., WCB
- Biostatistics: Basic Concepts and Methodology for the Health Sciences, 10th Ed. Wayne W. Daniel, Chad L. Cross
- Harper's Biochemistry, Murray, Granner, 23rd Ed., Lange Interscience, New Jersey 2003
- Introduction to Biostatistics For Health Sciences, Micheal R. Chernick, Robert H. Friss,Willey
- Lehninger Principles of Biochemistry, Nelson, Cox, 3rd edition, Worth
- Medical Statistics at a Glance, Aviva Petrie, Caroline Sabin, Blackwell Science, London 2003
- Physics, Giancoli, 4th Ed., Prentice Hall
- Practical Statistics For Medical Research, Douglas Altman, Chapman & Hall, London 1995
- Principles of Physiology, Bern and Levy, 4th Ed.
- Temel Biyoistatistik, Mustafa Şenocak, Çağlayan Kitabevi, İstanbul 1990
- Textbook of Physiology, Guyton and Hall, 10th Ed.
- The Cell: A Molecular Approach, Cooper, 2nd Ed., ASM Press

SUMMARY OF THE COURSE 1.2			
Discipline	**Lecture & Group Discussion**	**Multidisciplinary Lab. & Clinical Skills Lab. Practice**	**Total**
Medical Biology	4		4
Biochemistry	26	9	35
Biostatistics	10		10
Physiology	6	2	8
Biophysics	20		20
Subtotal	66	**11**	**77**
PBL Module	8		8
ICS-1 Computer Skills in Medicine and Student Research Activities	12		12
Medical English	10		10
Atatürk's Principles and History of Modern Turkey	8		8
TFMS101 – Turkish for Medical Students-I (Foreign Students)	24		24
TFMS101- Turkish for Medical Students I (Interactive Session For Foreign Students)	11		11
Electives	8		8
TOTAL	**147**	**11**	**158**

	THEORETICAL AND PRACTICAL SESSIONS	LECTURER/TUTOR
Week-1 (26 November – 30 November, 2018)		
Monday	**26 November**	
08:40-09:30	TFMS101 – Turkish for Medical Students-I (Foreign Students)	Inst. Şerife Çelebi Sökmez Inst. Nevber İstillozlu
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli Inst. Ayşe Kozansoy
14:40-15:30		
15:40-16-30	MDCN-181-Forensic Sciences MDCN-182-Art and Craft for Medicine Students	Inst. Cemal Gürkan Inst. Nurtane Karagil
16:40-17:30		
Tuesday	**27 November**	
08:40-09:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
09:40-10:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
10:40-11:30	Atatürk's Principles and History of Modern Turkey	Dr Turgay Bülent Göktürk
11:40-12:30	Atatürk's Principles and History of Modern Turkey	Dr Turgay Bülent Göktürk

13:40-14:30	Homeostasis	Dr. Berrak Yeğen
14:40-15:30	Bioelectric potentials	Dr. Berrak Yeğen
15:40-16-30	Bioelectric potentials	Dr. Berrak Yeğen
16:40-17:30	STUDY TIME	
Wednesday	**28 November**	
08:40-09:30	**ICS Research Training**	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Physical principles: Diffusion and facilitated transport	Dr. Hülya Cabadak
14:40-15:30	Physical principles: Diffusion and facilitated transport	Dr. Hülya Cabadak
15:40-16-30	Active transport and secondary active transport	Dr. Hülya Cabadak
16:40-17:30	STUDY TIME	
Thursday	**29 November**	
08:40-09:30	First Aid Written Exam	Dr. Bülent Sezgin Dr. Didem Rıfkı Dr. Cihan Tüccar Dr. Halil Eren Sakallı
09:40-10:30	First Aid Written Exam	
10:40-11:30	First Aid Practical Exam	
11:40-12:30	First Aid Practical Exam	
13:40-14:30	First Aid Practical Exam	Dr. Bülent Sezgin Dr. Didem Rıfkı Dr. Cihan Tüccar Dr. Halil Eren Sakallı
14:40-15:30	First Aid Practical Exam	
15:40-16-30	First Aid Practical Exam	
16:40-17:30	First Aid Practical Exam	
Friday	**30 November**	
08:40-09:30	Signal transduction	Dr. Özgür Kasımay Çakır
09:40-10:30	Cell to cell adhesions	Dr. Özgür Kasımay Çakır
10:40-11:30	**Physiology LAB:** Cell Physiology-Group A	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
11:40-12:30	**Physiology LAB:** Cell Physiology-Group A	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
13:40-14:30	**Physiology LAB**: Cell Physiology-Group B	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
14:40-15:30	**Physiology LAB**: Cell Physiology-Group B	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
15:40-16-30	Intercellular communication	Dr. Alper Yıldırım
16:40-17:30	STUDY TIME	
Week-2 (3-7 December, 2018)		
Monday	**03 December**	
08:40-09:30	TFMS101 – Turkish for Medical Students-I (Foreign Students)	Inst. Şerife Çelebi Sökmez Inst. Nevber İstillozlu
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli

14:40-15:30		Inst. Ayşe Kozansoy
15:40-16-30 **16:40-17:30**	MDCN-181-Forensic Sciences MDCN-182-Art and Craft for Medicine Students	Inst. Cemal Gürkan Inst. Nurtane Karagil
Tuesday	**04 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent Göktürk
11:40-12:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent Göktürk
13:40-14:30	Introduction to metabolism and metabolic control	Dr. Betül Karademir
14:40-15:30	Introduction to metabolism and metabolic control	Dr. Betül Karademir
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Wednesday	**05 December**	
08:40-09:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
09:40-10:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
10:40-11:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
11:40-12:30	Overview of glycolysis	Dr. Saime Batırel
13:40-14:30	Reactions of glycolysis	Dr. Saime Batırel
14:40-15:30	Reactions of glycolysis	Dr. Saime Batırel
15:40-16-30	Reactions of glycolysis	Dr. Saime Batırel
16:40-17:30	Reactions of glycolysis	Dr. Saime Batırel
Thursday	**06 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	STUDY TIME	
11:40-12:30	STUDY TIME	
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Friday	**07 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	STUDY TIME	
11:40-12:30	STUDY TIME	
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	

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Week-3 (10- 14 December, 2018)		
Monday	**10 December**	
08:40-09:30	TFMS101 – Turkish for Medical Students-I (Foreign Students)	Inst. Şerife Çelebi Sökmez Inst. Nevber İstillozlu
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli Inst. Ayşe Kozansoy
14:40-15:30		
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Tuesday	**11 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent Göktürk
11:40-12:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent Göktürk
13:40-14:30	What is probability and probability distribution?	Dr. İlke Akçay
14:40-15:30	Bayes' Theorem	Dr. İlke Akçay
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Wednesday	**12 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	**PBL Module -1**	Dr. Maryam Norouzbahari Dr. Naife Sevdalı Inst. Duygu Gençalp Inst. Hüseyin Bıyıkoğlu Inst.Gizem Şanlıtürk
11:40-12:30		
13:40-14:30	Coupling of biological reactions with high energy metabolite	Dr. Hülya Cabadak
14:40-15:30	Coupling of biological reactions with high energy metabolite	Dr. Hülya Cabadak
15:40-16-30	Energetics of electron transport	Dr. Hülya Cabadak
16:40-17:30	STUDY TIME	
Thursday	**13 December**	
08:40-09:30	**ICS-1-SRA:** Comp&SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
09:40-10:30	**ICS-1-SRA:** Comp&SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
10:40-11:30	**ICS-1-SRA:** Comp&SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
11:40-12:30	**ICS-1-SRA:** Comp&SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
13:40-14:30	Interactive Session For Foreign Students	Inst. Mine Özerinç

14:40-15:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Friday	**14 December**	
08:40-09:30	**Y2C2 THEORETICAL EXAM**	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Tricarboxylic acid cycle and hexose monophosphate shunt	Dr. Goncagül Haklar
14:40-15:30	Tricarboxylic acid cycle and hexose monophosphate shunt	Dr. Goncagül Haklar
15:40-16-30	Tricarboxylic acid cycle and hexose monophosphate shunt	Dr. Goncagül Haklar
16:40-17:30	Tricarboxylic acid cycle and hexose monophosphate shunt	Dr. Goncagül Haklar
Week-4 (17- 21 December, 2018)		
Monday	**17 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	Physical characteristics of membrane structure and function	Dr. Cevdet Nacar
10:40-11:30	Membrane proteins	Dr. Cevdet Nacar
11:40-12:30	Introduction to bioelectricity-I	Dr. Cevdet Nacar
13:40-14:30	Introduction to bioelectricity-I	Dr. Cevdet Nacar
14:40-15:30	Introduction to bioelectricity-II	Dr. Cevdet Nacar
15:40-16-30	Introduction to bioelectricity-II	Dr. Cevdet Nacar
16:40-17:30	STUDY TIME	
Tuesday	**18 December**	
08:40-09:30	Applications of recombinant DNA technology in medicine	Dr. Şükrü Tüzmen
09:40-10:30	Applications of recombinant DNA technology in medicine	Dr. Şükrü Tüzmen
10:40-11:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent Göktürk
11:40-12:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent Göktürk
13:40-14:30	Electron transport chain	Dr. Goncagül Haklar
14:40-15:30	Electron transport chain	Dr. Goncagül Haklar
15:40-16-30	Oxidative Phosphorylation	Dr. Goncagül Haklar
16:40-17:30	Oxidative Phosphorylation	Dr. Goncagül Haklar
Wednesday	**19 December**	
08:40-09:30	Genome of mitochondria	Dr. Şükrü Tüzmen
09:40-10:30	Importance of genome projects in medicine	Dr. Şükrü Tüzmen
10:40-11:30	**PBL Module -2**	Dr. Maryam Norouzbahari Dr. Naife Sevdalı Inst. Duygu Gençalp Inst. Hüseyin Bıyıkoğlu Inst.Gizem Şanlıtürk
11:40-12:30		
13:40-14:30	Electrochemical potentials, Nernst potential	Dr. Cevdet Nacar
14:40-15:30	Membrane potentials and action potential	Dr. Cevdet Nacar
15:40-16-30	Membrane potentials and action potential	Dr. Cevdet Nacar
16:40-17:30	Flow of energy in nature, first law of thermodynamics	Dr. Cevdet Nacar

Thursday	**20 December**	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Flow of energy in nature, first law of thermodynamics	Dr. Cevdet Nacar
11:40-12:30	The second law of thermodynamics, entropy, free energy	Dr. Cevdet Nacar
13:40-14:30	The second law of thermodynamics, entropy, free energy	Dr. Cevdet Nacar
14:40-15:30	Free energy and thermodynamic properties of water	Dr. Cevdet Nacar
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Friday	**21 December**	
08:40-09:30	**Y3C2 THEORETICAL EXAM (starts at 9.30)**	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
14:40-15:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
15:40-16-30	Interactive Session For Foreign Students	Inst. Mine Özerinç
16:40-17:30	Interactive Session For Foreign Students	Inst. Mine Özerinç
Week-5 (24- 28 December, 2018)		
Monday	**24 December**	
08:40-09:30	TFMS101 – Turkish for Medical Students-I (Foreign Students)	Inst. Şerife Çelebi Sökmez Inst. Nevber İstillozlu
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli Inst. Ayşe Kozansoy
14:40-15:30		
15:40-16-30	MDCN-181-Forensic Sciences MDCN-182-Art and Craft for Medicine Students	Inst. Cemal Gürkan Inst. Nurtane Karagil
16:40-17:30		
Tuesday	**25 December**	
08:40-09:30	**NOEL DAY**	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Wednesday	**26 December**	
08:40-09:30	Principles of statistical analysis	Dr. İlke Akçay

09:40-10:30	Elements of statistical inference	Dr. İlke Akçay
10:40-11:30 **11:40-12:30**	**PBL Module-3**	Dr. Maryam Norouzbahari Dr. Naife Sevdalı Inst. Duygu Gençalp Inst. Hüseyin Bıyıkoğlu Inst.Gizem Şanlıtürk
13:40-14:30	Oxidation of lipids	Dr. Betül Karademir
14:40-15:30	Oxidation of lipids	Dr. Betül Karademir
15:40-16-30	Biosynthesis of lipids	Dr. Betül Karademir
16:40-17:30	STUDY TIME	
Thursday	**27 December**	
08:40-09:30	Introduction to statistical analysis	Dr. İlke Akçay
09:40-10:30	Sampling, distribution and estimation	Dr. İlke Akçay
10:40-11:30	Biosynthesis of lipids	Dr. Betül Karademir
11:40-12:30	Biosynthesis of lipids	Dr. Betül Karademir
13:40-14:30	Biosynthesis of lipids	Dr. Betül Karademir
14:40-15:30	Gluconeogenesis and glycogen metabolism-1	Dr. Betül Karademir
15:40-16-30	Testing statistical hypothesis	Dr. İlke Akçay
16:40-17:30	Types of errors in statistical inference	Dr. İlke Akçay
Friday	**28 December**	
08:40-09:30	**ICS-1-SRA:** Comp & SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
09:40-10:30	**ICS-1-SRA:** Comp & SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
10:40-11:30	**ICS-1-SRA:** Comp & SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
11:40-12:30	**ICS-1-SRA:** Comp & SRA:	Dr. İlke Akçay Dr. Özge Cumaoğulları Eker
13:40-14:30	Gluconeogenesis and glycogen metabolism-1	Dr. Betül Karademir
14:40-15:30	Gluconeogenesis and glycogen metabolism-2	Dr. Betül Karademir
15:40-16-30	Gluconeogenesis and glycogen metabolism-2	Dr. Betül Karademir
16:40-17:30	Role of organelles in the metabolism	Dr. Betül Karademir
Week 6 (31- 4 January, 2018)		
Monday	**31 December**	
08:40-09:30 **09:40-10:30** **10:40-11:30** **11:40-12:30**	TFMS101 – Turkish for Medical Students-I (Foreign Students)	Inst. Şerife Çelebi Sökmez Inst. Nevber İstillozlu
13:40-14:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli

14:40-15:30		Inst. Ayşe Kozansoy
15:40-16-30	MDCN-181-Forensic Sciences	Inst. Cemal Gürkan
16:40-17:30	MDCN-182-Art and Craft for Medicine Students	Inst. Nurtane Karagil
Tuesday	**01 January**	
08:40-09:30	**CHRISTMAS DAY**	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Wednesday	**02 January**	
08:40-09:30	**PBL Module-4**	Dr. Maryam Norouzbahari Dr. Naife Sevdalı Inst. Duygu Gençalp Inst. Hüseyin Bıyıkoğlu Inst.Gizem Şanlıtürk
09:40-10:30		
10:40-11:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group A	Dr. Betül Karademir Dr. Ergül Mutlu Altundağ Inst. Duygu Gençalp
11:40-12:30	**Biochemistry LAB:** Anaerobic Glycolysis-Group A	
13:40-14:30	**Biochemistry LAB** : Anaerobic Glycolysis-Group A	Dr. Betül Karademir Dr. Ergül Mutlu Altundağ Inst. Duygu Gençalp
14:40-15:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group A	
15:40-16-30	**Biochemistry LAB** : Anaerobic Glycolysis-Group A	
16:40-17:30	**Biochemistry LAB** : Anaerobic Glycolysis-Group A	
Thursday	**03 January**	
08:40-09:30	Difference between parametric and nonparametric methods; Introduction to parametric methods	Dr. İlke Akçay
09:40-10:30	One sample t-test, unpaired t-test and paired t-test	Dr. İlke Akçay
10:40-11:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group B	Dr. Betül Karademir Dr. Ergül Mutlu Altundağ Inst. Duygu Gençalp
11:40-12:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group B	
13:40-14:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group B	Dr. Betül Karademir Dr. Ergül Mutlu Altundağ Inst. Duygu Gençalp
14:40-15:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group B	
15:40-16-30	**Biochemistry LAB :** Anaerobic Glycolysis-Group B	
16:40-17:30	**Biochemistry LAB :** Anaerobic Glycolysis-Group B	
Friday	**04 January**	
08:40-09:30	STUDY TIME	
09:40-10:30	**Biochemistry LAB :** Electron transport chain Group A	Dr. Saime Batırel Dr. Ergül Mutlu Altundağ Inst. Duygu Gençalp
10:40-11:30	**Biochemistry LAB :** Electron transport chain Group A	
11:40-12:30	**Biochemistry LAB :** Electron transport chain Group A	

13:40-14:30	**Biochemistry LAB :** Electron transport chain Group A	Dr. Saime Batırel Dr. Ergül Mutlu Altundağ Inst. Duygu Gençalp
14:40-15:30	**Biochemistry LAB :** Electron transport chain Group A	
15:40-16-30	**Biochemistry LAB :** Electron transport chain Group A	
16:40-17:30	STUDY TIME	
Week 7 (7- 11 January, 2018)		
Monday	**07 January**	
08:40-09:30	**PRACTICAL EXAM**	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Tuesday	**08 January**	
08:40-09:30	**PRACTICAL EXAM**	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Wednesday	**09 January**	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Thursday	**10 January**	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Friday	**11 January**	
08:40-09:30	**Y1C2 THEORETICAL EXAM (starts at 9.30)**	
09:40-10:30		

Last updated on Dec. 19, 2018

10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		