

T.C.

ATILIM UNIVERSITY FACULTY OF MEDICINE

EDUCATION IN 2020-2021 ACADEMIC YEAR

ACADEMIC CALENDAR

**\*\* Schedule for MED201 committee was revised and re-organized due to COVID-19 pandemic. Laboratory Practices listed below will be held at 2<sup>nd</sup> Semester. \*\***

**Laboratory Lessons:**

1. Clinical skill: Fever measure (1 hour, Dr. Tülek)
2. Clinical skills: Physical Examination of Lymph Nodes (2 hours)
3. Lab: Pathology of Lymph Nodes (2 hours, Pathology)
4. Lab: Thymus and Spleen (2 hours, Pathology)
5. Lab: Antibiotic Susceptibility Test (2 hours, Microbiology)

COMMITTEE NAME	STARTING DATE	COMPLETION DATE
MED 201	05.10.2020	13.11.2020
MED 202	22.02.2021	30.04.2021
MED 203	16.11.2020	22.01.2021
MED 204	03.05.2021	11.06.2021

	MED 201	MED 202	MED 203	MED 204
ANATOMY PRACTICAL EXAM DATE				
HISTOLOGY AND EMBRYOLOGY PRACTICAL EXAM DATE				
COMMITTEE EXAM DATE	13.11.2020			

## MED 201 COMMITTEE

<b>PHASE II COORDINATOR</b>	Prof. Dr. Ali ACAR		
<b>PHASE II VICE COORDINATOR</b>	Instructor Dr. Badegül SARIKAYA		
<b>CHAIRMAN OF THE MED 201 COMMITTEE</b>	Prof. Dr. Necla TÜLEK		
<b>MED 201 COMMITTEE DATE RANGE</b>	05.10.2020- 13.11.2020		
<b>ACADEMIC STAFF AT THE MED 201 COMMITTEE</b>	Prof. Dr. Ali ACAR- Microbiology Prof. Dr. Figen AYHAN- Physical Medicine and Rehabilitation Prof. Dr. Gamze YURDAKAN Prof. Dr. Hasan Cem RAZI- Peditry- Allergy and Immunology Prof. Dr. Müge TECDER- Medical Pharmacology Prof. Dr. Nedret KILIÇ – Biochemistry Prof. Dr. Necla TÜLEK – Microbiology-Immunology Prof. Dr. Siren SEZER- Internal Medicine-Nephrology Assoc. Prof. Dr. Hale ÖKTEM – Anatomy Asst. Prof. Dr. Ali Doğan DURSUN-Physiology Asst. Prof. Dr. Esin BODUROĞLU- Pathology Asst. Prof. Dr. Nuriye Ezgi BEKTUR AYKANAT- Histology and Embryology		
<b>ACADEMIC STAFF</b>	<b>INTERACTIVE EDUCATION TIME</b>	<b>CLINICAL SKILL</b>	<b>TOTAL TIME</b>
<b>Anatomy</b>		2	6
<b>Histology and Embryology</b>	-		8
<b>Microbiology-Immunology</b>	5	2	59
<b>Medical Pharmacology</b>	-		13
<b>Medical Biochemistry</b>	-		3
<b>Medical Pathology</b>	-		19
<b>Physiology</b>	-		3
<b>Pediatric Allergy and Immunology</b>	-		4
<b>Internal Medicine -Nephrology</b>	-		2
<b>Physical Medicine-Rehabilitation</b>	1		1
<b>TOTAL</b>	6	4	118

<b>MED 122 RESEARCH PROJECT</b>	<b>Total Time</b>
ALL ACADEMIC STAFF	12

<b>Office Hour</b>	-
--------------------	---

### **CONTENT OF THE MED 201 COMMITTEE**

Introduction to anatomy, development of the cells and organs of immune system, general features and functions of immune cells, innate and acquired immune response, immune response against microorganisms, hypersensitivity, autoimmunity, immunodeficiency, immune modulation, autocoids, antibiotic use, and resistance mechanisms, cancer etiology and basic mechanisms of cancer development.

### **MED 201 COMMITTEE AIM**

To overview the definition and elements of the immune system, the development, structure and functions of the immune system elements, disorders related to this system, and immunotherapeutic. Also, to gain basic medical skills for evaluation of immune system. To give information about human flora, fever mechanism, basic principles of antibiotic use and antibiotic resistance mechanisms.

### **MED 201 COMMITTEE LEARNING OBJECTIVES**

- 1- Explains the medical importance of Immune Systems
- 2- Lists the elements of immune system
- 3- Describe the essential characteristics of humoral and cell-mediated immunity
- 4- Explain the embryological development and histological features of tonsilla palatin.
- 5- Describes the embryological development and histological features of the lymph node.
- 6- Explain embryological development and histological features of the thymus and spleen.
- 7- Explains the histological features and functions of the cells of the immune system.
- 8- Explains anatomy and functions of lymphoid tissues
- 9- Explains the leukocyte circulation and migration
- 10- Describes the innate immunity; components and functions
- 11- Defines the complement system
- 12- Describes the acute and chronic inflammation and mechanisms involved.
- 13- Defines antigens and antibodies
- 14- Describe the theory of clonal selection
- 15- Explains the recognition of microorganisms by the immune system
- 16- Explains the stimulation of adaptive immunity
- 17- Describe the cells involved in the adaptive immune response-T cells, B cells and antigen presenting cells
- 18- Explain pathogenesis of the non-neoplastic disorders of the leukocytes
- 19- Describe non-neoplastic & neoplastic diseases of lymphnodes, the spleen & thymus
- 20- Explains B cell activation and antibody production
- 21- Describes the antibody structure and functions
- 22- Explains the antigen presentations of T lymphocyte
- 23- Describes the role of MHC in the immune responses
- 24- Defines Immune receptors and signal transduction
- 25- Explains the activation of T lymphocytes
- 26- Explain the difference between self and non-self
- 27- Explains the Immunologic tolerance and autoimmunity.
- 28- Describes the role of immunogenetics, infections, tissue injury, and other environmental factors in autoimmunity.
- 29- Explains the immune response against microorganisms
- 30- Describe in overall terms what the host defence is, why we need it, what it does and how it does it
- 31- Explains the mechanisms of hypersensitivity disorders and give two examples for each
- 32- Discuss the immunologic basis of graft rejection
- 33- Describes the primary and secondary immunodeficiencies
- 34- Lists the immunomodulatory agents and primary indications for them.
- 35- Discuss the potential therapeutic roles of cytokines or antibodies for treatment of infectious diseases.
- 36- Describe a range of tests used in evaluation of immune system and immune response.
- 37- Defines the autucanoids and give examples
- 38- Describe the basic principles of antimicrobial use.
- 39- Explains the mechanisms of development of antimicrobial resistance

40- Explains the mechanisms in development of cancer.

**RECOMMENDED BOOKS**

1. Basic & Clinical Pharmacology (14th Edition); Bertram G. Katzung, Anthony J. Trevor; McGraw-Hill, 2018.
2. Braddom's Physical Medicine and Rehabilitation (5th Edition); David X. Cifu MD; Elsevier, Philadelphia, 2016.
3. Gray's Anatomy for Students (3rd Edition); Richard L. Drake, A. Wayne Vogl, Adam W. M. Mitchell; Churchill Livingstone Elsevier, Philadelphia, 2015.
4. Guyton and Hall Textbook of Medical Physiology (13th Edition); John E. Hall; Elsevier, Philadelphia, 2016.
5. Histology and Cell Biology: An Introduction to Pathology (4th Edition); Abraham L. Kierszenbaum, Laura L. Tres; Elsevier Saunders, Philadelphia, 2015.
6. Medical Microbiology 8th Edition. Murray, Rosenthal, Pfaller, Elsevier Saunders, Philadelphia, 2016
7. Jawetz, Melnick, & Adelberg's Medical Microbiology, 28e, 2019, McGraw-Hill Education
8. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 9th Edition, Bennett, JE, Dolin R, Blaser MJ. Elsevier, 2019
9. Robbins Basic Pathology (10th Edition); Vinay Kumar, Abul K. Abbas, Jon C. Aster; Elsevier Saunders, Philadelphia, 2018.
10. Basic Immunology: Functions and Disorders of the Immune System, 5e, Abbas, Lichtmann, Pillai, Elsevier, 2016.
- 11- Review of Medical Microbiology and Immunology, 15th Edition by Warren Levinson, Peter Chin-Hong, Elizabeth Joyce, Jesse Nussbaum, Brian Schwartz. 2018.

**MED 201 COMMITTEE EXAM WEEK**

DATE	EXAM NAME	EXAM HOUR		
13.11.2020	MED 201 Committee Exam	10:30-13:20		
<b>Teaching Methods and Techniques</b>	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> Case based learning	<input checked="" type="checkbox"/> Case discussion	<input type="checkbox"/> Student presentation
	<input checked="" type="checkbox"/> Discussion	<input type="checkbox"/> Problem based learning	<input type="checkbox"/> Project	<input type="checkbox"/> Homework
	<input type="checkbox"/> Role playing	<input type="checkbox"/> Lab report	<input type="checkbox"/> Free Study	<input checked="" type="checkbox"/> Laboratory practice
	<input checked="" type="checkbox"/> Online education	<input checked="" type="checkbox"/> Clinical skill		
<b>Evaluation Method</b>	Theoretical Exam (70%), Homework Assignment (30%)			
<b>Lesson Language</b>	English			