**T.C.**

**ATILIM UNIVERSITY FACULTY OF MEDICINE**

**EDUCATION IN 2022-2023 ACADEMIC YEAR**

**ACADEMIC CALENDAR**

**Laboratory Lessons:**

1. Lab: Histology of Tonsilla palatina and Lymph Node & Histology of the Spleen and Thymus (1 hour, Dr. Aykanat)
2. Lab: Inflammation (1 hour, Dr. Boduroğlu & Dr. Yurdakan)
3. Clinical Skill: Physical examination of lymph node (1 hour, Dr. Öktem)
4. Lab: Neoplastic proliferations of white cells (Dr. Boduroğlu & Yurdakan)
5. Clinical Skills: Fever Measurement (1 hour, Dr. Tülek & Dr. Acar)
6. Lab: Flow cytometry (1 hour, Dr. Özalp)

|  |  |  |
| --- | --- | --- |
| **COMMITTEE NAME** | **STARTING DATE** | **COMPLETION DATE** |
| **MED 201** | 12.09.2022 | 21.10.2022 |
| **MED 203** | 24.10.2022 | 30.12.2022 |
| **MED 202** | 16.01.2023 | 24.03.2023 |
| **MED 204** | 27.03.2023 | 05.05.2023 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MED 201** | **MED 202** | **MED 203** | **MED 204** |
| **CLINICAL SKILL EXAM DATE** | 19.10.2022 |  |  |  |
| **COMMITTEE EXAM DATE** | 20.10.2022 |  |  |  |

**MED 201 IMMUNE SYSTEM** **COMMITTEE**

|  |  |
| --- | --- |
| **PHASE II COORDINATOR** | Prof. Dr. Ali ACAR |
| **PHASE II VICE COORDINATOR**  | Instructor Dr. Badegül SARIKAYA |
| **CHAIRMAN OF THE MED 201 COMMITTEE** | Prof. Dr. Necla TÜLEK |
| **MED 201 COMMITTEE DATE RANGE** | 12.09.2022 - 21.10.2022 |
| **ACADEMIC STAFF AT THE MED 201 COMMITTEE** | Prof. Dr. Ali ACAR- MicrobiologyProf. Dr. Veli Cengiz ÖZALP- Medical BiologyProf. Dr. Gamze YURDAKAN - PathologyProf. Dr. Cem Hasan RAZI- Pediatry- Allergy and ImmunologyProf. Dr. Nedret KILIÇ – Medical BiochemistryProf. Dr. Necla TÜLEK – Medical Microbiology & ImmunologyProf. Dr. Siren SEZER- Internal Medicine-NephrologyAssoc. Prof. Dr. Hale ÖKTEM – AnatomyAsst. Prof. Dr. Ali Doğan DURSUN-PhysiologyAsst. Prof. Dr. Esin BODUROĞLU- PathologyAsst. Prof. Dr. Nuriye Ezgi BEKTUR AYKANAT- Histology and EmbryologyAsst. Prof. Dr. Gökşen ÖZ- PharmacologyAsst. Prof. Dr. Recep Ali BROHI- Anatomy |
|

|  |  |
| --- | --- |
|  |  |

**ACADEMIC STAFF** | **THEORETICAL LECTURE TIME** | **PRACTICAL LECTURE TIME** | **INTERACTIVE EDUCATION****TIME** | **TOTAL TIME** |
| **Anatomy** | 2 | 1 | - | 3 |
| **Histology and Embryology** | 6 | 1 | - | 7 |
| **Microbiology-Immunology** | 37 | 1 | 6(PBL) | 44 |
| **Medical Pharmacology** | 7 | - | - | 7 |
| **Medical Biochemistry** | 2 | - | - | 2 |
| **Medical Pathology** | 14 | 2 | 1(CBL) | 17 |
| **Physiology** | 3 | - | - | 3 |
| **Pediatric Allergy and Immunology** | 4 | - | - | 4 |
| **Internal Medicine -Nephrology** | 2 | - | - | 2 |
| **TOTAL** | 77 | 5 | 7 | 89 |

|  |  |
| --- | --- |
| **Office Hour** | 06.10.2022 16:30-17:20 |

|  |
| --- |
| **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 Systems2. Lists the elements of immune system3. 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 tissues9. Explains the leukocyte circulation and migration 10. Describes the innate immunity; components and functions11. Defines the complement system12. Describes the acute and chronic inflammation and mechanisms involved.13. Defines antigens and antibodies14. Describe the theory of clonal selection 15. Explains the recognition of microorganisms by the immune system16. Explains the stimulation of adaptive immunity17. 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 leukocytes19. Describe non-neoplastic & neoplastic diseases of lymph nodes, the spleen & thymus20. Explains B cell activation and antibody production21. Describes the antibody structure and functions22. Explains the antigen presentations of T lymphocyte 23. Describes the role of MHC in the immune responses24. Defines Immune receptors and signal transduction25. Explains the activation of T lymphocytes26. 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 autoimmunity29. Explains the immune response against microorganisms30. Describe in overall terms what the host defence is, why we need is, what it does and how it does it31. Explains the mechanisms of hypersensitivity disorders and give two examples for each32. Discuss the immunologic basis of graft rejection 33. Describes the primary and secondary immunodeficiencies34. Lists the immunomodulatory agents and primary indications for them.35. Explains the immunopharmacology.36. Describe a range of tests used in evaluation of immune system and immune response.37. Defines the drugs used in Rheumatoid Arthritis & Gout 38. Explains the mechanisms in development of cancer.39 Apply the fever measurement.40. Apply lymph node examination. |
| **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 Livingston 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,20167. Jawetz, Melnick, & Adelberg's Medical Microbiology, 28e, 2019,  McGraw-Hill Education8. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 9th Edition, Bennett, JE, Dolin R, Blaser MJ. Elsevier, 20199. 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, 6e, Abbas, Lichmann, Pillai, Elsevier, 2019.11. Review of Medical Microbiology and Immunology, 16th Edition by Warren Levinson, Peter Chin-Hong, Elizabeth Joyce, Jesse Nussbaum, Brian Schwartz. 2020. |
| **MED 201 COMMITTEE EXAM WEEK** |
| **DATE** | **EXAM NAME** | **EXAM HOUR** |
| 19.10.2022 | Clinical Skill Exam | 09:30-12:20 |
| 20.10.2022 | MED 201 Committee Exam | 10:00-12:00 |
| **Teaching Methods and Techniques** |

|  |  |  |  |
| --- | --- | --- | --- |
| [x]  Lecture | [x]  Case based learning | [x]  Case discussion | [ ]  Student presentation |
| [x]  Discussion | [x]  Problem based learning | [ ]  Project | [ ]  Homework |
| [ ]  Role playing | [ ]  Lab report  | [ ]  Self Learning | [x]  Laboratory practice |
| [x]  Online education | [x]  Clinical skill | [x]  Flip class based learning |  |

 |
| **Evaluation Method** | Theoretical Exam (80%), Clinical Skills (10%), Problem Based Learning (8%), Flip Class Based Learning (2%) |
| **Lesson Language** | English |