**T.C.**

**ATILIM UNIVERSITY MEDICAL SCHOOL**

**EDUCATION in 2024-2025 ACADEMIC YEAR**

**SPRING SEMESTER ACADEMIC CALENDAR**

**Laboratory Lessons:**

1. Medical Skills: Glove Use (1 hour, Dr. Usluca & Dr. Eren)
2. Food borne, water borne, soil transmitted parasites (1 hour, Dr.Tülek & Dr. Usluca)

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| **COMMITTEE NAME** | **STARTING DATE** | **COMPLETION DATE** |
| **MED 106** | 28.04.2025 | 23.05.2025 |

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| **COMMITTEE EXAM DATE** | 21th and 23.05.2025 |

**MED 106 PUBLIC HEALTH**

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| **PHASE I COORDINATOR** | | Asst. Prof. Dr. Badegül SARIKAYA | | | | |
| **Chair of the  MED 106 COMMITTEE** | | Prof. Dr. Ahmet SALTIK | | | | |
| **MED 106 COMMITTEE  DATE RANGE** | | 28.04.2025 - 23.05.2025 | | | | |
| **ACADEMIC STAFF with  The MED 106 COMMITTEE** | | Prof. Dr. Ahmet SALTIK- Public Health  Prof. Dr. Necla TÜLEK- Medical Microbiology  Prof. Dr. Nedret KILIÇ- Medical Biochemistry  Prof. Dr. Nesrin ÇOBANOĞLU-Medical Deontology, History & Ethics  Assoc. Prof. Dr. Selma USLUCA-Medical Microbiology  Asst. Prof. Dr. Sami EREN-Medical Pharmacology  Asst. Prof. Dr. Özge BOYACIOĞLU- Medical Biochemistry  Dr. Merve TOPCU BULUT- Clinical Psychology | | | | |
| |  |  | | --- | --- | |  |  |   **ACADEMIC STAFF** | | **THEORETICAL LESSON TIME** (hours) | **PRACTICAL LESSON TIME** (hours) | **INTERACTIVE EDUCATION TIME** (hours) | | **TOTAL TIME** (hours) |
| **Public health** | | 20 | - | - | | 20 |
| **Medical Pharmacology** | | 2 | - | - | | 2 |
| **Medical Microbiology** | | 9 | 2 | - | | 11 |
| **Medical History** | | 3 | - | - | | 3 |
| **Medical Biochemistry** | | 10 | - | - | | 10 |
| **Emergency Medicine** | | 2 | - | - | | 2 |
| **Clinical Psychology** | | 2 | - | - | | 2 |
| **TOTAL** | | 48 | 2 | 0 | | 50 |
| **AIMS of the Committee**  **Gained** essential knowledge and basic concepts of health, social medicine & public health, determinants of health, health level indicators, healthcare management, social justice public health disasters such as epidemics, sterilization, drug development, Community Screenings, Epidemiologic Research Technics, Clinical Trials, Basic Lide Support, Food-Water Hygiene & Safety, Globalisation & Public Health, Health Level Indicators, Principles of healthcare management **to define** the basic principles of clinical trials and **to have knowledge** about the herbal medicines**.** | | | | | | |
| **MED 106 COMMITTEE LEARNING OBJECTIVES At the end of This Committee, Students are expected to:** | | | | | | |
| 1. Explain the concepts of health and disease. 2. Define the concepts of social medicine and public health. 3. Describe the development of public health discipline in developed and developing countries. 4. Realise relationships between globalization & public’s health. 5. Define the determinants of health. 6. Describe the behavior and believes related to health. 7. Explain the effects of socioeconomic inequalities on health. 8. Explain human rights and its associations with health. 9. Explain the influence of health in social events and in risky groups. 10. Define the importance of discrimination in public gender and compares its effect  in terms of health. 11. Summarize health-related social policies. 12. Explain and compare national and international health policies. 13. Explain and illustrate national and international health problems. 14. Lists national and international health organizations, and explain their responsibilities. 15. Explain the principles of healthcara management. 16. Lists the social and economic indicators of health. 17. Describe main health level indicators. 18. Explain how to measure health level of the community. 19. Describe the legal dimension of community health. 20. Describe the psyco-social and biological environment. 21. Describe major environmental health issues and public health disasters, 22. Understand management of outbreaks and epidemics. 23. Explain the negative impact of environmental pollution-degradation on health. 24. Explain the effects of urbanization and industrialization on health. 25. Explain the major principles of protecting and promoting health. 26. Explain the importance of the food & water safety 27. Describe the importance of physical activity 28. What are foodborne, waterborne, soilborne parasites? Give examples of important parasites in each group. Explain the morphological, epidemiological, clinical features, diagnosis, treatment and prevention methods of these parasites. 29. Describe the PPE, explain the indications. 30. Define sterilization, disinfection, asepsis, antisepsis. 31. Describe the general effects chemical and physical agents have on membranes,  proteins, and nucleic acids which are lethal to cells. 32. Compare various physical and chemical methods used in the control of microorganisms. 33. Understand various disinfection and sterilization techniques, evaluate the  sterility testing, microbial assays, pharmacopoeial standards of sterilization process. 34. Explain the factors affecting to choose the methods in hospitals. 35. Distinguish the adverse effects of (ionizing) radiation and protection methods 36. Describe the historical development of medicine in Turkiye. 37. To introduce students to the evolution of medical knowledge and practices from ancient civilizations to modern times, with emphasis on key milestones and paradigm shifts in medical thought and healthcare systems. 38. To foster an understanding of the socio-cultural, religious, and philosophical contexts that have shaped the development of medicine throughout history. 39. To examine the contributions of prominent figures, civilizations, and institutions in the advancement of medical science, with a comparative view of Eastern and Western medical traditions. 40. To cultivate an appreciation for the historical roots of contemporary medical ethics, professional behavior, and public health policies, emphasizing the importance of historical awareness in clinical decision-making. 41. To encourage critical thinking by analyzing historical texts, case studies, and visual sources in order to understand how past medical practices were influenced by and in turn influenced societal structures and beliefs. 42. To develop foundational academic skills such as historical analysis, academic reading and writing, and interdisciplinary thinking, which will support students’ future engagement with medical humanities and ethics. 43. To highlight the continuity and changes in medical education, patient-doctor relationships, and institutional healthcare through historical case studies and global perspectives. 44. Define human normal flora and microbiota, the benefits of human normal flora and microbiota on human health. 45. Define what clean / safe water and food are 46. Know how to obtain clean water / food 47. Know the infectious diseases transmitted by water/food and the ways of protection  from these diseases. 48. Explains how proteins are broken down into amino acids and smaller peptides in the digestive system. 49. Identifies the structure and function of key digestive organs involved in protein metabolism. 50. Describes the mechanisms of amino acid transport, including active and passive transport across the cell membrane. 51. Recognizes the transport proteins involved in amino acid uptake and their role in cellular function. 52. Describes the urea cycle’s role in nitrogen metabolism and the detoxification of ammonia in the body. 53. Explains the key enzymes involved in the urea cycle, including carbamoyl phosphate synthetase and ornithine transcarbamylase. 54. Illustrates how the urea cycle is integrated with the citric acid cycle (TCA cycle) and how they interconnect for energy production and waste removal. 55. Describes the metabolism of amino acids, including their biosynthesis and catabolism. 56. Explains the metabolism of branched-chain amino acids (BCAAs) and their role in protein synthesis. 57. Explains the regulation of the urea cycle, including feedforward and feedback mechanisms. 58. Defines the process of ammonia detoxification through the urea cycle. 59. Identifies the metabolic basis and clinical features of phenylketonuria (PKU). 60. Defines the cause and clinical presentation of maple syrup urine disease (MSUD). 61. Describes the metabolic defect in homocystinuria and its clinical manifestations. 62. Explains the consequences of urea cycle disorders and their treatments, such as protein restriction. 63. Know the basic principles of drug development and clinical trials. 64. Know the basic concepts about herbal medicines. 65. Conceive Public Health Disaster 66. Understanding Public Health Challenges in the 21st Century 67. Learning Principles of healthcare management 68. Learn the types of addictions. 69. Identify the types of evidence used to determine whether a substance is addictive. 70. Describe the short and long-term physical and psychological effects of drug abuse and behavioral addictions. 71. Differentiate between recreational drug use and substance use disorders based on clinical criteria. 72. Recognize how substance-related problems manifest differently in different ages. 73. Identify key risk factors associated with the initiation and the development of addictions. | | | | | | |
| **RECOMMENDED REFERENCES** *(Selected)*   1. Katzung's Basic and Clinical Pharmacology (Ed. Todd W. Vanderah),16th Edition, McGraw Hill Lange, 2023. 2. Basic and Clinical Pharmacology (Ed. Katzung BG, Masters SB, Trevor AJ), 12th Edition, McGraw Hill Lange, 2012. 3. Goodman and Gilman's The Pharmacological Basis of Therapeutics (Eds: L. Brunton,‎ B. Knollmann), 14th Edition, McGraw Hill, 2022. 4. Goodman & Gillman’s The Pharmacological Basis of Therapeutics (Ed. Brunton LL, Hilal-Dandan R, Knollmann BC), 13th Edition, McGraw-Hill Education, 2018. 5. Dr. Mehmet Can Akyolcu, 2015, Biophysics, İstanbul Üniversitesi Cerrahpaşa Tıp Fak.  (Yay. no 295, Rektörlük yayın no 5215, ISBN 978-605-07-0588-1). 6. Mahajan, B. K., & Lal, S. (1999). Methods in biostatistics for medical students and  research workers. Indian Journal of Community Medicine, 24(3), 140. 7. Jawetz, Melnick, & Adelberg's Medical Microbiology, 28e, McGraw-Hill Education, 2019 8. Medical Microbiology (8th Ed.); Patrick Murray, Ken Rosenthal, Michael Pfaller;  Elsevier Saunders, Philadelphia, 2016. 9. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. J Bennett,  R Dolin, M.J. Blaser, 9 th Ed., 2019 10. Oxford Textbook of Public Health (7th Ed.); R. Detels, Q.A. Karim, F. Baum, L. Li, A.H. Leyland; Oxford Medical Publications, 2022. 11. Textbook of Family Practice, 9th Ed. RE Rakel, DP Rakel, 2015 12. Robbins Basic Pathology (10th Ed.). V. Kumar, A.K. Abbas, JC Aster; Elsevier Saunders, Philadelphia, 2018. 13. Park’s Textbook of Preventive and Social Medicine (23rd Ed.); K. Park, Bhanot, 2015. 14. Evaluating Public and Community Health Programs (2nd Ed.); Muriel J. Harris;  John Wiley & Sons, New York, 2016. 15. Apurba S Sastry, Sandhya Bhat, Essentials of Medical Microbiology, 3th Edition, JAYPEE BROTHERS Medical Publishers, New Delhi | London, 2021. 16. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 9th Edition, Bennett, JE, Dolin R, Blaser MJ. Elsevier, 2020. 17. Gunn A, Pitt SJ, Parasitology An Integrated Approach, Wiley, 2th Edition, 2022. 18. Murray, Rosenthal, Pfaller. Medical Microbiology (9th Edition); 2020. 19. Netter’s Infectious Diseases, ELAINE C. JONG, DENNIS L. STEVENS, Elsevier, 2th Edition, 2022. 20. <https://iris.who.int/handle/10665/337956> (Laboratory biosafety manual) 21. Comparative Health Systems: A Global Perspective (2nd Ed.); JA Johnson, C Stoskopf, L Shi;  Jones & Bartlett Publishers, Burlington, 2018. 22. Epidemiology (5th Ed.); L. Gordis; Elsevier Saunders, Philadelphia, 2014. 23. Medical Physiology, 3rd Ed. by Boron, Walter F, Boulpaep, Emile L. (2017) 24. Çobanoğlu, N. (2009) Kuramsal ve Uygulamalı Tıp Etiği, Eflatun Yayınevi, Ankara. 25. The Cambridge illustrated history of medicine, edited by Roy Porter, Cambridge University Press, 4th edition, 2004. 26. Modern Epidemiology. TL Lash, TJ VanderWeele, S Haneause. W Kluwer.  Lippincott Williams & Wilkins, 2021 27. Primary Care Medicine. Julie Ann St. John, Susan L. Mayfield-Johnson. Springer Nature, 2021. 28. Public Health. JM Shultz, LM. Sullivan. Springer Publ. Comp. 2021 29. Population Health, Epidemiology, and Public Health: Management Skills for Creating Healthy Communities, 2nd Ed. Rosemary M. Caron. Gateway to Healthcare Management, 2022. 30. Essentials of Health Policy and Law. Sara E. Wilensky. Jones & Bartlett Learning, 2023 31. Global Population Health: A Primer. Richard Skolnik. Jones & Bartlett Learning, 2023. 32. Progress towards universal health coverage and inequalities in infant mortality: An analysis of 4·1 million births from 60 low-income and middle-income countries between 2000 and 2019. The Lancet, Vol. 12. Number 5 | May 2024, p e712-e890 33. Nelson, David L., Michael M. Cox, and Aaron A. Hoskins. Lehninger Principles of Biochemistry. 8th ed., Macmillan Learning, 2021. 34. **Official websites :** The WHO (World Health Organisation), UNFPA, UNEP, FAO, UNICEF, CDC, ILO, NIH, NLM, Türk Tabipleri Birliği - Turkish Medical Association, HASUDER – Halk Sağlığı Uzmanları Derneği (Association of Public Health Specialists), [www.ahmetsaltik.net](http://www.ahmetsaltik.net), Johns Hopkins School of Public Health, EUPHA, The Lancet, The Science, The Nature, OECD Health Data 35. Park’s Textbook of Preventive and Social Medicine. Author: K. Park. Publisher: Banarsidas Bhanot Publishers. Most Recent Edition: 27th Edition (2023) 36. Last’s Dictionary of Epidemiology. Editor (Latest Edition): Miquel Porta (building upon the legacy of John M. Last) Publisher: Oxford University Press, Latest Edition: 6th Edition (2014) 37. American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., text rev.; DSM-5-TR). 38. American Psychiatric Publishing. World Health Organization. (2022). International classification of diseases for mortality and morbidity statistics (11th Revision). https://icd.who.int/ | | | | | | |
| **MED 106 COMMITTEE EXAM WEEK** | | | | | | |
| **DATE** | **EXAM NAME** | | | | **EXAM HOUR** | |
| 21.05.2025 | Medical Skills Exam | | | | 09:30-12:20 | |
| 23.05.2025 | MED 106 Committee Exam & Discussion of Qs | | | | 09:30-12:20 | |
| **Teaching Methods and Techniques** | |  |  |  |  | | --- | --- | --- | --- | | Lecture | Case based learning | Case discussion | Student presentation | | Role playing | Problem based learning | Project | Homework | | Laboratory practice | Team based learning | Self-Learning | Small group application  based learning | | | | | | |
| **Evaluation Method** | Theoretical Exam (90% ) + Medical Skills Exam (10% ) | | | | | |
| **Teaching Language** | English | | | | | |