**T.C.**

**ATILIM UNIVERSITY FACULTY OF MEDICINE**

**EDUCATION IN 2023-2024 ACADEMIC YEAR**

**ACADEMIC CALENDAR**

**Laboratory Lessons:**

1. Medical Skills: Anthropometric measurements in newborn (1 hour, Dr. Öktem)

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| **COMMITTEE NAME** | **STARTING DATE** | **COMPLETION DATE** |
| **MED 301** | 18.09.2023 | 27.10.2023 |
| **MED 303** | 30.10.2023 | 08.12.2023 |
| **MED 305** | 11.12.2023 | 04.01.2023 |
| **MED 302** | 22.01.2024 | 23.02.2024 |
| **MED 304** | 26.02.2024 | 05.04.2024 |
| **MED 306** | 08.04.2024 | 10.05.2024 |

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| **COMMITTEE NAME** | | | | | | |
|  | **MED 301** | **MED 302** | **MED 303** | **MED 304** | **MED 305** | **MED 306** |
| **MEDICAL SKILLS EXAM DATE** |  | 22.02.2024 |  |  |  |  |
| **COMMITTEE EXAM DATE** |  | 23.02.2024 |  |  |  |  |

**MED302 EARLY AGES OF LIFE**

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| **PHASE III COORDINATOR** | Prof. Dr. Yekbun Adıgüzel | | | |
| **CHAIR OF THE MED 302 COMMITTEE** | Inst. Dr. Evren Tuncer | | | |
| **MED 302 COMMITTEE DATE RANGE** | 22.01.2023 - 23.02.2024 | | | |
| **ACADEMIC STAFF**  **AT THE MED 302 COMMITTEE** | Prof. Dr. Necla TÜLEK- Medical Microbiology  Prof. Dr. Gamze YURDAKAN ÖZYARDIMCI- Pathology  Prof. Dr. Ahmet SALTIK- Public Health  Prof. Dr. Yekbun ADIGÜZEL- Medical Biology  Prof. Dr. Mustafa Kılıç- Pediatric Metabolism  Assoc. Prof. Dr. Ezgi Bektur Aykanat- Histology and Embryology  Assoc. Prof. Dr. Esra Kılıç- Pediatric Genetics  Assoc. Prof. Dr. Emre Günakan- Gynecology and Obstetrics  Assoc. Prof. Dr. Yusuf Aytaç Tohma- Gynecology and Obstetrics  Assoc. Prof. Dr. Ece Göçmen-Pediatrics  Assoc. Prof. Dr. Mustafa Suat Bolat-Urology  Asst. Prof. Dr. Ali Doğan Dursun-Physiology  Asst. Prof. Dr. Banu Kumrulu- Pediatric Surgery  Asst. Prof. Dr. İbrahim Sinan Buğur- Pediatrics  Asst. Prof. Dr. Burcu Karamürsel- Gynecology and Obstetrics  Inst. Dr. Evren TUNCER- Medical Pharmacology | | | |
| |  |  | | --- | --- | |  |  |   **ACADEMIC STAFF** | **THEORETICAL LECTURE TIME** | **PRACTICAL LECTURE TIME** | **INTERACTIVE EDUCATION**  **TIME** | **TOTAL TIME** |
| **Medical Biology** | 2 | - | - | 2 |
| **Medical Microbiology** | 3 | - | - | 3 |
| **Medical Pharmacology** | 2 | - | 2 (Flipped Class) | 4 |
| **Medical Pathology** | 8 | - | - | 8 |
| **Public Health** | 6 | - | - | 6 |
| **Histology and Embryology** | 3 | - | - | 3 |
| **Gynecology and Obstetrics** | 14 | - | - | 14 |
| **Pediatrics** | 17 | - | - | 17 |
| **Anatomy** | - | 1 | - | 1 |
| **Urology** | 2 | - | - | 2 |
| **TOTAL** | 57 | 1 | 2 | 60 |

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| **Advisor Visit** | - |

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| **CONTENT OF THE MED 302 COMMITTEE** | | |
| Introduction to Early Ages of Life Committee, Pregnancy, Pregnancy Follow-up, Birth, Prenatal risk factors, Neonatal respiratory distress syndrome, Principles of Genetic Variation, Intrauterine infections: Diagnosis & interpretation of tests, Metabolic problems in newborn, Principles of Gene Regulation and Epigenetics, Perinatal risk factors, Screening tests in pregnancy, Pediatric nutrition, Medical Skills: Anthropometric measurements in newborn, TBL, Newborn and prematurity, Genetic Variation Producing Disease-Causing Abnormalities in DNA and Chromosomes, Other newborn problems, Drug usage in pregnancy, Identifying Disease Genes and Genetic Susceptibility to Complex Disease, Genetic Approaches to Treating Disease, Maternal & child health: Public health aspect, Neonatal necrotizing enterocolitis, Fetal hydrops, Evaluation of Growth, Social groups under risk from the point of maternal & child health, Social groups under risk from the point of maternal & child health: Case sample, PBL, Cancer Genetics and Genomics, Genetic Testing from Genes to Genomes, and the Ethics of Genetic Testing and Therapy, Healthy child follow-up, Nutritional Assessments Before - During Pregnancy and Breastfeeding for MCH  (MCH: Maternal & Child Health), Global infant and child health, Tumors and Tumorlike Lesions of Infancy and Childhood. | | |
| **MED 302 COMMITTEE AIM** | | |
| To learn preconception evaluation, pregnancy problems, antenatal and perinatal tests, the risks factors of labor, normal and high-risk pregnancies, obstetric problems during labor, gene regulation and epigenetics, chromosomal abnormalities, single gene Mendelian diseases, benign and solid tumors in childhood, respiratory distress syndrome (RSD), main problems seen in premature and newborns with IUGR, asphyxia, Rh incompatibility, sepsis in newborn, anthropometric measurement, percentiles during in childhood follow-up, main metabolic screening tests in newborn, neonatal jaundice, neonatal hypoglycemia, antenatal screening and pre-pregnancy screening, importance of medical communication at basic level, drug therapy during breastfeeding, knowledge on basic public health problems of global infant and child health, nutrition. | | |
| **MED 302 COMMITTEE LEARNING OBJECTIVES** | | |
| 1. Defines the criteria of risk factors before preconception. 2. Recognizes the risks of medical problems that will affect the pregnancy. 3. Defines the importance of antenatal tests. 4. Defines the importance of the effects of previous pregnancies to the current one. 5. Recognizes the milestones of the follow-up for a healthy newborn. 6. Defines the risk factors of the labor. 7. Defines the hemorrhagic problems during pregnancy. 8. Differs the normal and high-risk pregnancies. 9. Differs the obstetric problems during labor and delivery. 10. Distinguishes principles of genetic variation 11. Discriminates single-gene disorders 12. Recognizes principles of gene regulation and epigenetics 13. Discerns genetic variation producing disease-causing abnormalities in DNA and chromosomes 14. Differentiates how to identify disease genes and genetic susceptibility to complex disease 15. Differs genetic approaches to treating disease 16. Recognizes principles of cancer genetics and genomics 17. Tells apart genetic testing from genes to genomes, and the ethics of genetic testing and therapy 18. Describes the pathophysiological mechanisms and etiopathogenetic features of diseases that are common in the neonatal period and have high clinical morbidity and mortality effects. 19. Explains the physiopathological features of single-gene Mendelian disorders that occur in early childhood and to pay attention to common genetically transmitted diseases in terms of public health. 20. Defines common benign and malignant solid tumors in childhood, to explain their histological and biological differences from those seen in adulthood and their etiopathogenesis with general principles. 21. Explains the causes of RDS 22. Defines diagnostic criteria and symptoms 23. Explains main complications of RDS 24. Explains first line and prophylactic treatment after delivery 25. Defines newborns according to the gestational ages. 26. Defines newborns according to the birth weight. 27. Explains differences between SGA and IUGR. 28. Explains main problems seen in premature and newborns with IUGR. 29. Explains main complications seen in newborns. 30. Explains when to think Rh incompatibility, 31. Defines what is the main findings of Rh incompatibility. 32. Defines laboratory exams for diagnosis. 33. Explains the preventive methods 34. Defines differences between early and late sepsis. 35. Defines main causes of sepsis. 36. Explains when to think sepsis in newborns. 37. Explains first line treatment of neonatal sepsis. 38. Defines how to measure weight and height in childhood by age. 39. Defines growth velocity and other growth characteristics by age 40. Explains how to follow-up growth in childhood. 41. Explains how to use growth charts during follow-up 42. Defines how to use percentiles during the childhood follow-up. 43. Explains early newborn care and procedures in newborn period. 44. Explains the main metabolic screening test in newborn period 45. Explains the Recommended Childhood Immunization Schedule 46. Explains important Emerging Patterns of Behaviors in childhood in different ages. 47. Explains what kind of procedures should be applied in each visit 48. Defines the diagnostic criteria of physiologic and pathologic jaundice 49. Defines the differences between physiologic and pathologic jaundice 50. Defines the diagnostic features of the various types of neonatal jaundice 51. Defines hypoglycemia. 52. Defines main causes of hypoglycemia 53. Defines features of neonatal hypoglycemia 54. Explains management of hypoglycemia 55. Defines hypocalcemia 56. Defines main causes of early and late hypocalcemia 57. Defines features of neonatal hypocalcemia 58. Explains management of hypocalcemia 59. Highlights the clinical signs seen in early stages of the disease to enable timely diagnosis. 60. Describes the importance of antenatal screening and pre-pregnancy screening 61. Becomes familiar with the interpretation of laboratory tests for diagnosing syphilis, Cytomegalic inclusion diseases, Toxoplasmosis, rubella, varicella, herpes simplex, Zika virus, ParvovirusB19 62. Explains prevention strategies 63. Describes Physiologic Changes During Pregnancy and Their Impact on Drug Disposition and Dosing 64. Defines drug actions on pregnant population, a population with unique physiological and biochemical characteristics 65. Defines teratogenesis, pregnancy risk categories and new labeling rules 66. Defines drug therapy during breastfeeding 67. Defines the meaning of Communication procedures in medicine. 68. Gives definition of Communication and construct a conceptual framework then acquiring essential knowledge about it. 69. Conceives the importance of Medical Communication at basic level 70. Describes the crucial functions of Medical Communication at basic level 71. Defines the basic concepts in MCH and its disease of burden 72. Realises the place & importance of MCH issues within integral Public Health holistic aspect 73. Develops responsibility in order to ameliorate public health problems within MCH field 74. Conceives essentials of Nutrition during these vulnerable periods of life both for mother and baby 75. Explains Informing & consulting patients about nutritional issues within these fragile phases of life 76. Explains advocating related public health problems to be mitigated and solved within community 77. Acquires necessary knowledge on the basic Public Health Problems of Global Infant & Child Health 78. Defines the place, share and the importance of Global Infant & Child Health issues whitin entire Picture 79. Contributes this problematic field of medicine with the sight of Public Health. 80. Explains the normal healthy child nutrition. 81. Maintains newborn heat. 82. Ensures newborn airway. 83. Evaluates the APGAR score. 84. Measures weight-height. 85. Evaluates newborn vital signs. 86. Assesses head to toe evaluation. 87. Evaluates reflexes. 88. Explains decreasing childhood death and infant mortality rate. 89. Explains the promotion and protection of health of child. 90. Describes the nutritious diet to children. 91. Defines monitoring child growth and development. 92. Explains newborn care and breast feeding. 93. Defines Immunization. 94. Explains early detection of health problems and treatment 95. Describes the etiology, pathogenesis and clinical symptoms of acute diarrhea. 96. Describes the management of acute diarrhea. 97. Explains the classification of Newborn. 98. Explains APGAR score. 99. Explains the vital signs of newborn. 100. Explains the commonly encountered infectious diseases at childhood. 101. Describes the etiology and symptoms of the diseases. 102. Describes treatments of the diseases. 103. Describes congenital metabolic diseases, to reinforce with case reports, questions and answers. 104. Explains the screening programs in our country and in the world. 105. Describes the prevention, early diagnosis and treatment of congenital metabolic diseases. 106. Explains chromosomal and single gene diseases that cause congenital anomaly, intellectual disability and malformation syndrome. 107. Differs the techniques utilized to identify disease genes and genetic susceptibilities to complex diseases". 108. Define physiologic processes that influence pharmacokinetic variables in the infant change significantly in the first year of life. 109. Define pediatric dosage forms and adherence 110. Explain the determinants of pediatric dosage calculations 111. Defines the highlights of fetal period and related congenital pathologies 112. Defines the teratology 113. Defines the teratogenic agents for embryonic and fetal periods of human development | | |
| **RECOMMENDED BOOKS**   1. Tom Strachan, Judith Goodship, & Patrick Chinnery. (2015). Genetics and Genomics in Medicine. Garland Science. 2. Robbins Basic Pathology Tenth Ed., 2018 by Elsevier Inc Vinay Kumar, MBBS, MD, FRCPath., Abul K. Abbas, MBBS, Jon C. Aster, MD, PhD 3. Understanding pathophysiology First canadian Ed. 2018 by Elsevier Inc. Sue Huether; Kelly PowerKean; Mohamed ElHussein 4. Pathophysiology of Diseases: An introduction in clinical medicine 8 ed. 2019 by McGraw-Hill Education; Lange Inc. Gary D. Hammer, MD, PhD Stephen J. McPhee, MD 5. Pathophysiology: The biologic basis for diseases in adults and children 8th ed. 2019 by Elsevier Inc. Kathryn L. McCance, MS, PhD Sue E. Huether, MS, PhD Valentına L. Brashers, Neal S. Rote, PhD 6. Rapid Review Pathology, Fifth Edition 2019 by Elsevier, Inc. Edward F. Goljan, MD 7. Kliegman, Nelson Textbook of Pediatrics, International Edition, 21st Edition, Welcome to the 21st Edition of Nelson Textbook of Pediatrics. 8. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases (9th Edition); Bennett, JE, Dolin R, Blaser MJ. Elsevier, 2019. 9. Current Diagnosis & Treatment Obstetrics & Gynecology 12 Edition, 2019. 10. Undergraduate Manual of Clinical Cases in Obstetrics & Gynaecology 2nd/2021 by Hephzibah 11. Author: N. Hephzibah Kirubamani, A.P. Nalini Alexander, R. Premlatha Edition: 2nd Publisher: Elsevier Year: 2021 ISBN: 9788131261545 12. Park’s Textbook of Preventive and Social Medicine (23rd Edition); K. Park; Bhanot, 2015. 13. Evaluating Public and Community Health Programs (2nd Edition); Muriel J. Harris; John Wiley & Sons, New York, 2016. 14. Comparative Health Systems: A Global Perspective (2nd Edition); James A. Johnson, Carleen Stoskopf, Leiyu Shi; Jones and Bartlett Publishers, Burlington, 2018. 15. Katzung, B.G., Vanderah T,W., Basic &Clinical Pharmacology,15th Ed., 2021, McGrawHill Lange, New York 16. Katzung, B.G., Kruidering-Hall,, M., Trevor, A.J., Katzung & Trevor’s Pharmacology Examination & Board Review, 13th Ed, 2021, New York, 17. Ritter, J.M., Flower R., Henderson G., Rang & Dale’s Parmacology, 9th Ed, 2020, Elsevier, Edinburgh 18. Brunton L.L., Goodman & Gilmans’s The Pharmacological Basisi of Therapeutics, 13th Ed, 2018, McGrawHill, NewYork1. 19. Whalen K., Lippincottt Illustrated Reviews Pharmacology, 7th Ed., 2019, Wolters Kluwer, Philadelphia 20. Kliegman, St Geme, Blum, Shah, Tasker, Wilson, Nelson Textbook of Pediatrics, Elsevier, 21st Edition. 21. Avery & MacDonald's Neonatology: Pathophysiology and Management of the Newborn, (2021) 8th Edition. 22. Yurdakök, M., Yurdakök Pediatrics, (2017) Güneş Tıp Kitabevi. 23. Saudubray, J. M., Baumgartner, M.R., García-Cazorla, A., Walter, J.H., Inborn Metabolic Diseases Diagnosis and Treatment, 7th Edition, 2022, Springer 24. Genetics Section, Nelson Textbook of Pediatrics, 21st Edition by MD Robert M. Kliegman, MD and Joseph St. Geme, MD 25. Strachan, T., Goodship, J., Chinnery, P., Identifying Disease Genes and Genetic Susceptibility to Complex Disease. 2015. In Genetics and Genomics in Medicine. Garland Science (Chapter 8) 26. Multifactorial Traits. 2012. In Human Genes and Genomes. Science, Health, Society. L. E. Rosenberg and D. D. Rosenberg. Elsevier (Chapter 13) 27. Decherney, A. H., Nathan, L., Laufer, N., Roman, A. S., Lange Current Diagnosis & Treatment Obstetrics & Gynecology, Mc Graw Hill Education, 12th Edition 28. The Developing Human, clinically oriented embryology 9th edition, Keith L. Moore, T.V.N. Persaud, Mark G Torchia | | |
| **MED 302 COMMITTEE EXAM WEEK** | | |
| **DATE** | **EXAM NAME** | **EXAM HOUR** |
| 22.02.2024 | Medical Skills | 09:30-12:20 |
| 23.02.2024 | MED 302 Committee Exam | 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 | Student Panel | | Flipped Class | Medical Skill |  |  | | |
| **Evaluation Method** | Theoretical Exam (85%), Medical Skill (10%), Flipped Class (5%) | |
| **Lesson Language** | English | |