

T.C.
ATILIM UNIVERSITY FACULTY OF MEDICINE
EDUCATION IN 2024-2025 ACADEMIC YEAR
ACADEMIC CALENDAR

Laboratory Lessons:

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

COMMITTEE NAME	STARTING DATE	COMPLETION DATE
MED 301	18.09.2024	01.11.2024
MED 303	04.11.2024	13.12.2024
MED 305	16.12.2024	10.01.2025
MED 302	27.01.2025	28.02.2025
MED 304		
MED 306		

COMMITTEE NAME						
	MED 301	MED 302	MED 303	MED 304	MED 305	MED 306
MEDICAL SKILLS EXAM DATE		27.02.2025				
COMMITTEE EXAM DATE		28.02.2025				

MED302 EARLY AGES OF LIFE

PHASE III COORDINATOR	Prof. Dr. Yekbun Adıgüzel			
CHAIR OF THE MED 302 COMMITTEE	Asst. Prof. Dr. Onur Bulut			
MED 302 COMMITTEE DATE RANGE	27.01.2025 - 28.02.2025			
ACADEMIC STAFF AT THE MED 302 COMMITTEE	Prof. Dr. Necla Tülek - Medical Microbiology Prof. Dr. Gamze Yurdakan Özyardımcı - Pathology Prof. Dr. Ahmet Saltık - Public Health Prof. Dr. Mustafa Kılıç - Pediatric Metabolism Prof. Dr. Çağla Sönmez – Medical Biology Assoc. Prof. Dr. Hale Öktem - Anatomy Assoc. Prof. Dr. Ezgi Bektur Aykanat - Histology and Embryology Assoc. Prof. Dr. Selma Usluca – Medical Microbiology 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 Assoc. Prof. Dr. Ali Doğan Dursun – Physiology Asst. Prof. Dr. İbrahim Sinan Buğur - Pediatrics Asst. Prof. Dr. Banu Kumrulu - Pediatric Surgery Asst. Prof. Dr. Burcu Karamürsel - Gynecology and Obstetrics Asst. Prof. Dr. Recep Ali Brohi - Anatomy Asst. Prof. Dr. Onur Bulut – Medical Biochemistry Asst. Prof. Dr. Sami Eren - Medical Pharmacology Asst.Prof. Dr. Merve Topcu Bulut – Clinical Psychology			
ACADEMIC STAFF	THEORETICAL LECTURE TIME	PRACTICAL LECTURE TIME	INTERACTIVE EDUCATION TIME	TOTAL TIME
Medical Biology	2	-	-	2
Medical Biochemistry	1	-	-	1
Medical Microbiology	3	-	-	3
Medical Pharmacology	2	-	-	2
Medical Pathology	5	-	-	5
Public Health	6	-	-	6
Histology and Embryology	2	-	-	2
Gynecology and Obstetrics	13	-	-	13
Pediatrics	13	-	-	13
Anatomy	-	1	-	1
Urology	2	-	-	2
Physiology	6	-	-	6
Clinical Psychology	8	-	-	8
TOTAL	63	1	0	64

Advisor Visit	2
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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 within 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
- 114) Recognizing the importance of toxoplasmosis in the country and around the world
- 115) How is toxoplasmosis contracted, and where is this disease most commonly found
- 116) Classify parasite, describe the structure
- 117) Explain the parasites' life cycles.
- 118) Discuss the relationship between parasite and its host.
- 119) Explains the sources of infection, pathogenesis, clinical manifestations methods of diagnosis, prevention and control.
- 120) Define child maltreatment and neglect, and distinguish between its types (physical, emotional, sexual abuse, and neglect).
- 121) Identify the physical, psychological, and behavioral signs and indicators of child maltreatment and neglect.
- 122) Explain the short- and long-term physical, mental, and social health impacts of child maltreatment.
- 123) Understand the importance of collaboration between healthcare, social services, education, and legal authorities in responding to child maltreatment and describe the role of healthcare professionals in this process.

124) Identify the legal and ethical responsibilities of healthcare professionals when reporting suspected child maltreatment cases.

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 Valentina 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 Pharmacology, 9th Ed, 2020, Elsevier, Edinburgh
18. Brunton L.L., Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Ed, 2018, McGrawHill, New York.
19. Whalen K., Lippincott 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
29. Murray, Rosenthal, Pfaller. Medical Microbiology (9th Edition); 2020.
30. Tietz Textbook of Laboratory Medicine, Nader Rifai, Rossa WK Chiu, Ian Young, Carey-Ann D Burnham, Carl T Wittwer, Elsevier, 7th Edition, 2020.
31. Apurba S Sastry, Sandhya Bhat, Essentials of Medical Microbiology, 3th Edition, Jaypee Brothers Medical Publishers, New Delhi | London, 2021.
32. World Health Organization. (2022). Responding to child maltreatment: A clinical handbook for health professionals. World Health Organization.

MED 302 COMMITTEE EXAM WEEK

DATE	EXAM NAME	EXAM HOUR		
27.02.2025	Medical Skills	09:30-12:20		
28.02.2025	MED 302 Committee Exam	09:30-12:20		
Teaching Methods and Techniques	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Case based learning	<input type="checkbox"/> Case discussion	<input type="checkbox"/> Student presentation
	<input checked="" type="checkbox"/> Role playing	<input checked="" type="checkbox"/> Problem based learning	<input type="checkbox"/> Project	<input type="checkbox"/> Homework
	<input type="checkbox"/> Laboratory practice	<input type="checkbox"/> Team based learning	<input checked="" type="checkbox"/> Self Learning	<input type="checkbox"/> Student Panel
	<input type="checkbox"/> Flipped Class	<input checked="" type="checkbox"/> Medical Skill		
Evaluation Method	Theoretical Exam (90%), Problem Based Learning (PBL) (5%), Medical Skill (5%)			
Lesson Language	English			