Должность: Ректор Дата подписания: 0F.06.224 Autonomous Educational Institution for Higher Education Уникальный програм Reoples: Friendship University of Russia named after Patrice Lumumba са953a0120d891083f939673078ef1a989dae18a

Institute of Medicine

(Educational division)

COURSE SYLLABUS

TOPICAL ISSUES OF NEONATOLOGY

(Course name)

Recommended by the Didactic council for the Education field (specialty)

31.05.01 General Medicine

(Education field (specialty) code and title)

Recommended by the Didactic Council for the Education Field of:

31.05.01 General Medicine

(Higher education field (profile/specialization) title)

1. COURSE GOAL(s)

The goal of the course "Topical Issues of Neonatology" is to mastering theoretical and practical knowledge, skills and abilities in the field of diagnostics, emergency care, treatment tactics, medical examination and prevention of the most common diseases of newborns.

The discipline "Topical Issues of Neonatology" is part of the program of the specialty "General Medicine" in the field 31.05.01 "General Medicine" and is studied in the 9th semester in the 5th year. The discipline is implemented by the Department of Pediatrics. The discipline consists of 5 sections and 14 topics and is aimed at studying and improving basic, fundamental medical knowledge in the field of pediatrics, forming the professional competencies of a doctor capable of successfully solving professional problems.

2. REQUIREMENTS OF COURSE LEARNING OUTCOMES

The discipline "Topical Issues of Neonatology" is aimed at developing the following competences (parts of competencies) in students:

Table 2.1. List of competences formed in students during course of study (learning outcomes)

Code	Competence	Competence Development Indicators
PC-2	Able to examine a patient in order to determine a diagnosis	 PC-2.2. Able to make a preliminary diagnosis and make up a plan of laboratory and instrumental examinations of a patient. PC-2.7. Able to conduct a differential diagnosis with other diseases/conditions, including urgent ones, as well as to make a diagnosis taking into account the current international statistical classification of diseases and problems related to health (ICD).
PC-3	Able to prescribe treatment and monitor its efficacy and safety	PC-3.1. Able to develop a treatment plan for a disease or condition taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the

provision of medical care, taking into account
the standards of medical care.
PC-3.2. Able to prescribe medications,
medical devices and therapeutic nutrition
taking into account the diagnosis, age and
clinical picture of the disease and in
accordance with the current procedures for
the provision of medical care, clinical
guidelines (treatment protocols) on the
provision of medical care, taking into account
the standards of medical care.

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course "Topical issues of Neonatology" belongs to the part of the educational relations – block B1 of the Higher Education Programme – formed by students.

Within the framework of the educational programme, students also study other courses and/or practicals that contribute to achieving the expected learning outcomes of "Topical issues of Neonatology " course.

Code	Title of competence	Previous disciplines	Subsequent disciplines/modules, practicals*
	Able to examine a patient	Surgery practical: surgeon's assistant; Obstetrics and gynecology practical:	Obstetrics and gynecology practical: obstetrician's assistant; Practical in General practice:
	in order to determine a diagnosis	gynecologist's assistant; General surgery; Dermatovenerology;	pediatrician's assistant; Hospital therapy; Endocrinology;
PC-2		Neurology, medical genetics, neurosurgery;	Outpatient therapy; Hospital surgery, pediatric surgery;
		Ophthalmology; Faculty surgery;	Pediatrics; Obstetrics and gynecology;
		Obstetrics and gynecology; Otorhinolaryngology; Faculty therapy;	Anesthesiology, resuscitation, intensive care; Oncology, radiation therapy;
		Propaedeutics of internal diseases;	Reproductive health; Traumatology, orthopedics;
		Urology;	Maxillofacial Surgery;

Table 3.1. List of Higher Education Programme disciplines that contribute to expected learning outcomes

		Medical enzymology**; Molecular genetic methods; Microbiology, virology; Immunology; Evidence-based medicine; Molecular genetics in practical biology and medicine**; Radiation diagnostics; Pathophysiology, clinical pathophysiology; Pathological anatomy, clinical pathological anatomy; Medical elementology;	General medical skills; Emergency conditions; Infectious diseases; Psychiatry, medical psychology; Allergology; Phthisiology; Endoscopic urology; Telemedicine; Cardiology in quests; Sectional course;
PC-3	Able to prescribe treatment and monitor its efficacy and safety	Dermatovenerology; Neurology, medical genetics, neurosurgery; Faculty surgery; Obstetrics and gynecology; Otorhinolaryngology; <i>Clinical research**;</i> <i>Clinical Trials**;</i> Faculty Therapy; Ophthalmology; Urology; <i>Fundamentals of Integrative</i> <i>Medicine**;</i> Basics of therapeutic nutrition; <i>Introduction to Nutrition**;</i> Pharmacology; Surgery practical: surgeon's assistant; Obstetrics and gynecology practical: gynecologist's assistant;	Hospital therapy; Endocrinology; Outpatient therapy; Hospital surgery, pediatric surgery; Pediatrics; Obstetrics and gynecology; <i>Outpatient cardiology**;</i> Oncology, radiation therapy; Traumatology, orthopedics; Maxillofacial Surgery; Clinical pharmacology; Cardiology in quests; Infectious diseases; Psychiatry, medical psychology; Allergology; Phthisiology; Endoscopic urology; Telemedicine; Geriatrics and palliative medicine; Reproductive health; Obstetrics and gynecology practical: obstetrician's assistant; Practical in General practice: pediatrician's assistant;

* - created in accordance with the competence matrix and Higher Education programme

** - elective disciplines/practicals

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

Total course workload of "Topical issues of Neonatology" is equal to 2 credits.

Table 4.1. Types of academic activities during the period of the HE programme	
mastering for FULL-TIME studies	

	Total	Semester(s)
Type of academic activity	academic hours.	9
Classroom learning, academic hours	34	34
Lectures (L)	0	0

Type of academic activity		Total	Semester(s)
		academic hours.	9
Lab work (LW)		34	34
Seminars (workshops/tutorials) (S)		0	0
Self-study, academic hours	Self-study, academic hours		
<i>Evaluation and assessment (exam or po grading), academic hours</i>	3	3	
academTotal course workload		72	72
	credits	2	2

5. COURSE CONTENTS

Module	Course module names	Module c	Type of academic activity*	
Module 1	Introduction to	1.1.	Basic concepts of neonatology. Perinatal history. Neonatal risk groups. Anatomical and physiological features and methods of medical examination of the newborn.	LW
	neonatology	1.2.	Adaptation of the newborn (borderline, transient states).	LW
		1.3.	Neonatal screening.	LW
1		1.4.	The premature newborn.	LW
Module 2	Perinatal pathology of the nervous system and birth	2.1.	Perinatal asphyxia, hypoxic- ischemic encephalopathy and its consequences.	LW
	trauma	2.2	Birth trauma.	LW
Module 3	Diseases associated with metabolic	3.1.	Neonatal jaundice (hyperbilirubinemia).	LW
	disorders	3.2.	Hemorrhagic disease of the newborn.	LW

Table 5.1. Course content (modules) according to type of academic activit	<i>Table 5.1.</i>	Course conter	t (modules) according to	type of	^c academic activit	y
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Module	Course module names	Module content (topics)		Type of academic activity*
		4.1.	Neonatal respiratory distress syndrome.	LW
Module 4	Iodule 4 Neonatal pulmonology	4.2.	Bronchopulmonary dysplasia (BPD).	LW
		4.3.	Congenital pneumonia.	LW
		5.1.	Neonatal infections of the skin and subcutaneous fat, omphalitis, conjunctivitis.	LW
Module 5	Perinatal infections.	5.2.	Neonatal sepsis.	LW
		5.3.	Congenital (intrauterine) infections.	LW

* - created for **<u>FULL-TIME</u>** study only: L – lectures; LW – lab work; S – seminars/workshops

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Classroom for academic activity type	Classroom equipment	Specialized educational/laboratory equipment, software and materials for the study of the discipline (if necessary)
Laboratory	A classroom for conducting seminar- type classes, group and individual consultations, continuous assessments and mid-term assessment, equipped with a set of specialized furniture and multimedia presentation equipment.	Set of specialized furniture; technical equipment: NEC VT59 multimedia projector, ASUS X50M and Dell Latitude D631 laptops, there is Internet access. Software: Microsoft products (OS, office application package, including MS Office / Office 365, Teams, Skype).
For self-studies	Classroom for students' independent work (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to EIES.	

* - classroom for students' independent study \underline{MUST} be indicated

7. RECOMMENDED SOURCES FOR COURSE STUDY

Main reading

- Robert M. Kliegman, Brett J. Bordini, Heather Toth et al. Nelson Pediatric Symptom-Based Diagnosis: Common Diseases and their Mimics. Elsevier, 2022. ISBN 978-0-323-76174-1. DOI: <u>https://doi.org/10.1016/C2019-0-01335-0</u>
- Sarah S. Long. Principles and Practice of Pediatric Infectious Diseases. Elsevier, 2022. ISBN 978-0-323-75608-2. DOI <u>https://doi.org/10.1016/C2019-0-00075-1</u>
- 3. Akhil Maheshwari. Principles of Neonatology. Elsevier, 2023. ISBN- 978-0-323-69415-5 DOI https://doi.org/10.1016/C2018-0-02694-8 URL:<u>https://www.sciencedirect.com/book/9780323694155/principles-of-neonatology#book-description</u>
- 4. Henry C. Lee. Neonatal Health Care. Children, 2021. ISBN 978-3-0365-0731-6. URL: https://www.mdpi.com/books/reprint/3841-neonatal-health-care

Additional reading

- 1. Tonia Vassilakou. Childhood Malnutrition. Children, 2021. ISBN 978-3-0365-2268-5 URL: https://www.mdpi.com/books/reprint/4560-childhood-malnutrition
- Neonatal and Pediatric Cerebro-Cardiopulmonary Resuscitation / Michael Shoykhet [et al.]. 2018. 1 c. ISBN 9782889456598 URL: <u>https://www.frontiersin.org/research-topics/4942/neonatal-and-pediatric-cerebro-cardio-pulmonary-resuscitation-ccpr</u>
- 3. Wynn J.L., Bliss J.M.. The Neonatal Immune System: A Unique Host-Microbial Interface, 2018. 1 c. ISBN 9782889454037 URL: https://www.frontiersin.org/researchtopics/5017/the-neonatal-immune-system-a-unique-host-microbial-interface
- Lissauer Tom. Illustrated Textbook of Paediatrics / T. Lissauer, W. Carrol. Fifth Edition - China : Elsevier, 2017. - 583 p.: il. - ISBN 978-0-7234-3871-7: 6113.30

Internet-(based) sources

1. RUDN ELS and third-part ELS with contract-based access for RUDN students:
RUDN Electronic library system – RUDN ELS
http://lib.rudn.ru/MegaPro/Web
"University library online" ELS
http://www.biblioclub.ru
Urait ELS
http://www.biblio-online.ru
«Консультант студента» ELS
www.studentlibrary.ru
«Лань» ELS
http://e.lanbook.com/
«Троицкий мост» ELS

2. Databases and search engines:
- electronic database of legal, regulatory and technical documentation http://docs.cntd.ru/
- Yandex search engine https://www.yandex.ru/
- Google search engine https://www.google.ru/
- SCOPUS reference database http://www.elsevierscience.ru/products/scopus/

Learning toolkits for students' self - studies in the mastery of the course/module:

1. Presentations on the discipline "Topical issues of Neonatology".

2. Methodological guidelines for the implementation and registration of testing and independent work on the discipline "Topical issues of Neonatology".

* - all learning toolkits for self- studies of students are on the course page in **RUDN LMS TUIS** in accordance with current procedures!

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION.

Assessment materials and grading system* for the evaluation of achieved competency levels (parts of competences) for the learning outcomes of the "Topical issues of Neonatology" course are presented in the appendix to this Course syllabus.

* - assessment and grading systems are based on the corresponding local regulatory act of RUDN University

DEVELOPERS:

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Position, ED

Signature

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