

1.	Subject	NEWBORN CARE			
2.	Code	DA – 213			
3.	Study program:	Three-year professional studies for graduate obstetricians			
4.	Conducted by	UKIM – Medical faculty Department of Pediatrics			
5.	Degree of education (first or second cycle)	Integrated cycle			
6.	Academic year/semester	II/III and IV	7.	Credits	6 credits – III semester 7 credits – IV semester
8.	Professor	Responsible professor: Prof. dr. Aspazija Sofijanova Department's Chair: Prof. d-r. Kata Martinova *the lessons are held by all the members of the Department of Pediatrics			
9.	Prerequisite	Passed exam in Neonatology			
10.	Goals	<p>The students get acquainted with the professional field and the interventions that the obstetrician performs in the care, hygiene and feeding of a healthy or sick newborn or premature baby. Special attention is paid on breastfeeding and its advantages. Attention is also dedicated to making the student able (gaining knowledge and skills) to assess vitality of a newborn after birth, follow the adaptation to extrauterine life, recognizing irregularities and performing interventions in case of different conditions and illnesses in a newborn or premature baby.</p> <p>After passing the exam, the student will be able to:</p> <ul style="list-style-type: none"> • Assess the newborn's vitality and condition after birth • Use the early "skin-to-skin" contact and recognize the importance of the first breastfeeding in the delivery room • Admit a newborn in the nursery "rooming in", provide first care and prophylaxis • Monitor the newborn in the early postnatal period • Recognize the characteristics of a healthy and high-risk newborn, follow the adaptation to extrauterine life and differentiate between physiological and pathological outcome • Predict the difficulties in adapting to extrauterine life and the risk factors • Recognize physiological jaundice, differentiate it from pathological and predict the outcome • Provide hygiene, bathing and changing of a newborn • Provide proper care of the cord stump, and predict the healing of the wound • List the characteristics of a newborn's nutrition, recognize the benefits of breastfeeding and educate the mother about breastfeeding and care of a baby • Explain breastfeeding technique and help the breastfeeding mother • Assess successful breastfeeding and see irregularities • Explain and follow the notions "10 steps to successful breastfeeding", Declaration of the newborn's rights and Convention on the rights of the child • Recognize pathological conditions and newborn's symptoms of a 			

		<p>certain illness</p> <ul style="list-style-type: none"> • Recognize birth asphyxia • Participate in resuscitation, preparing the equipment and medicine • Differentiate between birth traumas and the consequences • Recognize breathing problems, explain apnea, respiratory distress syndrome, meconium aspiration syndrome, connatal pneumonia, transient tachypnea, pulmonary hemorrhage • Recognize chromosomeopathy and malformation • Know the characteristics of premature and high-risk newborns • Know the feeding characteristics of premature and high-risk newborns • Provide enteral and parenteral feeding, place nasogastric tube • Place a newborn in an incubator • Provide oxygen therapy and artificial respiration, assist in endotracheal intubation • Keep normal flow of oxygen through the airways in a newborn placed on respiration • Perform veinpunction and take blood and urine sample for laboratory analysis • Provide parenteral medication use, place venous catheter and IV infusion • Take peripheral blood sample • Prepare a newborn for examination and diagnostic procedures • Provide care for a deceased newborn or premature baby • Predict the psychological condition of the mother and the family and provide psychological help • Keep obstetrical records
11.	<p>Content summary:</p> <p>Theoretical lessons: 20 lessons in the III semester and 30 in the IV semester Practical lessons: 140 lessons in the III semester and 160 lessons in the IV semester During the practical lessons, there is monitoring of newborns that require special care, including pre-term and post-term babies, babies with low birth-weight or sick newborns. The students get acquainted with the work and particular obstetrical interventions.</p> <p>Theoretical lessons: 20 lessons in the III semester</p> <p>Obstetrical care of a healthy newborn:</p> <ol style="list-style-type: none"> 1. Keeping obstetrical records 2. Characteristics of a healthy baby 3. Primary care of newborns 4. Assessing vitality 5. Admitting the baby in the nursery – rooming in, neonatal prophylaxis 6. Monitoring the newborn in the early postnatal period 7. Adapting the newborn to the extrauterine life 8. Physiological characteristics of a healthy newborn 9. Changing and bathing a newborn, skin hygiene and proper care of the cord stump 10. Physiological jaundice 11. Behavior and newborn’s reflexes 12. Neonatal screening 13. Vaccination in the neonatal period 	

	<ul style="list-style-type: none"> 14. Breastfeeding and nutrition, advantages of breastfeeding 15. Breastfeeding techniques 16. Improper breastfeeding, help and education of the mother 17. Veinpunction, taking blood sample for laboratory analysis 18. Taking peripheral blood sample 19. Taking urine sample and other bodily secretions 20. Parenteral use of medication, placing venous catheter <p>Theoretical lessons: 30 lessons in IV semester</p> <p>Obstetrical care of high-risk and pre-term newborns</p> <ul style="list-style-type: none"> 1. Admitting the newborn into the intensive care unit and therapy 2. Characteristics of a high-risk and pre-mature newborn 3. Placing the newborn in an incubator, use of oxygen 4. Adapting the high-risk and pre-term baby to extrauterine life 5. Behavior and reflexes 6. Preparing the newborn for an examination 7. Feeding the newborn with collected mother's milk, infant formulas 8. Feeding the newborn with a bottle 9. Placing a gastrostomy tube 10. Parenteral feeding 11. Breastfeeding, help and advice for the mother who breastfeeds 12. Changing and bathing the newborn, skin hygiene and proper care of the cord stump 13. Weighing 14. Monitoring the newborn and discovering problems with color, breathing 15. Monitoring the vital functions 16. Bower movement and urination monitoring 17. First aid in case of asphyxia of a newborn or pre-term baby, assessing vitality 18. Aspiration 19. Cutting the umbilical cord, cord blood testing 20. Veinpunction, taking blood sample for laboratory analysis 21. Taking peripheral blood sample 22. Taking urine sample and other bodily secretions for laboratory analysis 23. Placing a venous catheter, parenteral use of medication and placing an IV infusion 24. Neonatal screening 25. Transfusion of blood and blood products 26. Vaccination in the neonatal period 27. Assisting in exchange transfusion 28. Using phototherapy in newborns 29. Educating the mother during the discharge from the hospital 30. Keeping obstetrical records 		
12.	Teaching methods: Interactive practical lessons and training		
13.	Total classes:	390	
14.	Organization	Theoretical lessons: 20 lesson in the third semester and 30 lessons in the fourth semester Training: 140 lessons in the third semester and 160 lessons in the fourth semester Learning at home: 40 lessons	
15.	Types of teaching activities	15.1	Lessons: 20 lessons in the third semester and 30 lessons in

				the fourth semester
		15.2	Practical lessons	
16.	Other types of activities	16.1	Training	140 lessons in the third semester and 160 lessons in the fourth semester
		16.2	Self-supporting practice	
		16.3	Learning at home	40
17.	Knowledge assessment	Points		
	17.1	Tests		Min. – Max. Mid-term exams* 2: 15 - 25 Final exam: 20 - 35 Mid-term exams: 2 written multiple-choice tests Covers all the areas of Neonatology care: Mid-term exam 1: Healthy newborn: 15-25 points Mid-term exam 2: High-risk and pre-term newborn: 15-25 points
	17.2	Paper/project (oral/written presentation)		
	17.3	Active participation		
18.	Grading criterion (points/grades)	Theoretical lessons	10-20	
		Practical lessons	20-30	
		Mid-term exam 1	15-25	
		Mid-term exam 2	15-25	
		Oral exam		
		Total	60-100	
19.	Requirements for obtaining a signature and attending the final examination	To obtain a signature, the student must gain minimum points from visiting the lessons and the training. The final grade for the subject is formed according to the table for grading, and is based on the sum of the points from all the activities and mid-term exams.		
20.	Language	Macedonian		
21.	Method of evaluating the quality of the lessons	Students' attendance and interactive participation in the practical lessons and training		
22.	Literature	Mandatory literature		
	22.1	1.	Mary Rudolph, Tim Li, Malcolm Leven, Pediatrics and Children's Health, Ars Lamina, 2012	
		2.	Robert C.Taker, Robert J McLur, Carlo L Acerin, Pediatrics Handbook, Ars Lamina 2014	
		3.	Mardeshikj D et all., Pediatrics, Skolska Kniga, Zagreb, 2000	
		4.	Ljubinka Marinkovikj, Health care in pediatrics, Beograd, Primal, 2007	

	5.	Authorized lectures by the Department
	6.	Kuzmanovska D., Grujovska S., Physical diagnosis in Pediatrics, UKIM Medical Faculty, 2011
22.2	Additional literature	
	1.	Elizabeta Zisovska, Pediatrics and care – Textbook for medical nurses and technicians, University Goce Delcev, Shtip, 2019
	2.	Sunil Sinha, Lawrence Miall, Luke Jardune, 5 th edition essential neonatal medicine, Wiley-Blackwell Publishing, 2013
	3.	Kenner Carole, Altimier Leslie, Comprehensive Neonatal Nursing Care 6 th edition, Springer Publishing, 2019