

## Course description

### Part 1

General information about the course	
<b>1. Major of study:</b> medicine	<b>2. Study level:</b> unified MSc <b>3. Form of study:</b> intramural
<b>4. Year:</b> VI	<b>5. Semester:</b> II
<b>6. Course name:</b> Neonatal Intensive Care - Pediatrics Sub - I	
<b>7. Course status:</b> required	
<b>8. Course contents and assigned learning outcomes</b> Basic physiology of newborn and distinction between term and preterm newborn. Most common clinical problems of a term newborns. Most common clinical problems of a preterm newborns. Most common congenital defects of the newborns.	
<p style="color: blue;">Learning outcomes / reference to learning outcomes indicated in the standards</p> <p style="color: blue;">For knowledge – student knows and understands:</p> <ol style="list-style-type: none"> <li>1. Takes records, anamnesis, past history and assesses/ predicts risk factors and epidemiology within. E.W1 E.W3</li> <li>2. Precisely manages to assess and make a distinction between term and preterm newborn. E.W3</li> <li>3. Knows resuscitation algorithm, being skillfull in different cilinical situations; defines potential risk factors based on perinatal records. E. W6, E.U14</li> <li>4. Knows most common congenital defects with subsequent necessary procedures needed perinatally and postnatally. E.W5, F.W2</li> <li>5. Knows risk factors of an early and late onset infections, distinguishes etiology, course, severity and outcomes between them. E.W3</li> <li>6. Qualifies patient to discharge with immunization checklist evaluation and feeding regimens. E.W2</li> <li>7. Is able to interpret radiological features according to clinical condition, also depending on newborn maturity. E.W3</li> <li>8. Knows perinatal respiratory and hemodynamic physiological changes with the ability to diagnose differentially most common features and outcomes of pathological conditions. E.W3, E.U14</li> </ol> <p style="color: blue;">For skills student can do:</p> <ol style="list-style-type: none"> <li>1. Conducts and analyses anamnesis and past history, pregnancy care, prenatal screening, maternal medical conditions, perinatal and postnatal condition. E.U2</li> <li>2. Can perform physical examination of a term newborn. E.U4, E.U8</li> <li>3. Can perform physical examination of a preterm newborn. E.U4, E.U8</li> <li>4. Analyses past history and procedures putting through clinical assessment and examination. E.U12, E.U16</li> <li>5. Analyses and verifies physical assessment with radiological features. E.U12</li> <li>6. Analyses and verifies laboratory findings with potential causes of abnormalities in investigation. E.U24</li> <li>7. Qualifies to immunization according to schedule. E.U27</li> <li>8. Performs and interprets anthropometric measurements in correlation with growth charts. E.U9</li> <li>9. Performs resuscitation on phantoms according to up-to-date algorithms. E.U14</li> </ol> <p style="color: blue;">For social competencies student is ready to:</p> <ol style="list-style-type: none"> <li>1. Is able to maintain secrecy in connection with patient`s clinical condition and her/his parents with full due respect during taking records and examination. D.W5, D.U5</li> <li>2. Has the ability to perform procedures properly and reliably on the basis of informations given.</li> <li>3. Is aware of self – limitations and the need of constant education with practice. D.U16, D.U17</li> </ol>	

<b>9. Number of hours for the course</b>		<b>30</b>
<b>10. Number of ECTS points for the course</b> <i>*for the whole block of pediatrics sub-I</i>		<b>6</b>
<b>11. Methods of verification and evaluation of learning outcomes</b>		
Learning outcomes	Methods of verification	Methods of evaluation*
Knowledge	Grade credit – MCQ	*
Skills	Report Observation	*
Competencies	Observation	*

\* The following evaluation system has been assumed:

**Very good (5,0)** – the assumed learning outcomes have been achieved and significantly exceed the required level

**Better than good (4,5)** – the assumed learning outcomes have been achieved and slightly exceed the required level

**Good (4,0)** – the assumed learning outcomes have been achieved at the required level

**Better than satisfactory (3,5)** – the assumed learning outcomes have been achieved at the average required level

**Satisfactory (3,0)** – the assumed learning outcomes have been achieved at the minimum required level

**Un satisfactory (2,0)** – the assumed learning outcomes have not been achieved

## Course description

### Part 2

Other useful information about the course		
<b>12. Name of Department, mailing address, e-mail:</b>		
Department of Intensive Care and Neonatal Pathology ul. Medyków 16 , 40-752 Katowice, PL phone: 32 2071780 email: kitipn@gczd.katowice.pl www.gczd.katowice.pl		
<b>13. Name of the course coordinator:</b>		
Iwona Maruniak – Chudek MD, PhD, Assoc. Prof. SUM ichudek@sum.edu.pl		
<b>14. Prerequisites for knowledge, skills and other competencies:</b>		
<ol style="list-style-type: none"> <li>1. Basic knowledge of neonatal characteristics within the aspect of maternal medical conditions, pregnancy care, prenatal screening.</li> <li>2. Basic knowledge of specific aspects of adaptation to extrauterine life and neonatal resuscitation.</li> <li>3. Basic aspects of neonatal stabilization – term and preterm newborns.</li> <li>4. Respiratory, hemodynamic and gastrointestinal physiology of a child.</li> <li>5. Immune system – basics of mother vs fetus/infant interactions.</li> <li>6. Basic knowledge of physical examination of a child.</li> </ol>		
<b>15. Number of students in groups:</b>	In accordance with the Senate Resolution: 5	
<b>16. Study materials</b>	Scrubs/uniforms, medical footwear	
<b>17. Location of classes</b>	Department of Intensive Care and Neonatal Pathology ul. Medyków 16 , 40-752 Katowice, PL	
<b>18. Location and time for contact hours</b>	Department of Intensive Care and Neonatal Pathology ul. Medyków 16 , 40-752 Katowice, PL Thursday 1:00 – 2:00 PM	
19. Learning outcomes		
Number of the course learning outcome	Course learning outcomes	Reference to learning outcomes indicated in the standards
P_W01 / C_K01	Takes records, anamnesis, past history and assesses/ predicts risk factors and epidemiology within.	E.W1 E.W3
P_W02 / C_K02	Precisely manages to assess and make a distinction between term and preterm newborn.	E.W3
P_W03 / C_K03	Knows resuscitation algorithm, being skillfull in different cilinical situations; defines potential risk factors with perinatal records.	E. W6, E.U14
P_W04 / C_K04	Knows most common congenital defects with subsequent necessary procedures needed perinatally and postnatally.	E.W5, F.W2
P_W05 / C_K05	Knows risk factors of an early and late onset infections, distinguishes etiology, course, severity and outcomes between them.	E.W3
P_W06 / C_K06	Qualifies patient to discharge with immunization checklist evaluation and feeding regimens.	E.W2

P_W07 / C_K07	Is able to interpret radiological features according to clinical condition, also depending on newborn maturity.	E.W3
P_W08 / C_K08	Knows perinatal respiratory and hemodynamic physiological changes with the ability to diagnose differentially most common features and outcomes of pathological conditions.	E.W3, E.U14
P_U01 / C_S01	Conducts and analyses anamnesis and past history, pregnancy care, prenatal screening, maternal medical conditions, perinatal and postnatal condition.	E.U2
P_U02 / C_S02	Can perform physical examination of a term newborn.	E.U4, E.U8
P_U03 / C_S03	Can perform physical examination of a preterm newborn.	E.U4, E.U8
P_U04 / C_S04	Analyses past history and procedures putting through clinical assessment and examination.	E.U12, E.U16
P_U05 / C_S05	Analyses and verifies physical assessment with radiological features.	E.U12
P_U06 / C_S06	Analyses and verifies laboratory findings with potential causes of abnormalities in investigation.	E.U24
P_U07 / C_S07	Qualifies to immunization according to schedule.	E.U27
P_U08 / C_S08	Performs and interprets anthropometric measurements in correlation with growth charts.	E.U9
P_U09 / C_S09	Performs resuscitation on phantoms according to up-to-date algorithms.	E.U14
<b>20. Forms and topics of classes</b>		<b>Number of hours</b>
<b>21.1. Lectures</b>		<b>10</b>
Neonatology – introduction. Physical examination.		<b>3</b>
Neonatal resuscitation. BLS. ALS.		<b>4</b>
Neonatal infections. Emergencies in neonatology.		<b>3</b>
<b>23.3. Labs</b>		<b>20</b>
Term newborn – preterm – ELBW – IUGR. Assessment, clinical features and differential diagnosis.		<b>2</b>
Physical examination. Maturity assessment. Growth charts.		<b>3</b>
Feeding regimens in different clinical conditions. Enteral feeding. Total parenteral nutrition. Minimal trophic feeding.		<b>2</b>
Neonatal resuscitation. BLS. ALS. Presentation and training on phantoms.		<b>4</b>
Neonatal procedures manual.		<b>1</b>
Surgical emergencies. Differential diagnosis. Radiologic features and characteristics. Management.		<b>2</b>
Prematurity – most common medical conditions: Intraventricular haemorrhage (IVH), persistent ductus arteriosus (PDA), necrotizing enterocolitis (NEC), bronchopulmonary dysplasia (BPD), anaemia of prematurity (AOP), retinopathy of prematurity (ROP).		<b>3</b>
Screening tests. Immunization schedule.		<b>1</b>
Up to date neonatal treatment. Mechanical ventilation with different basic and advanced options of respiratory support (inhaled nitric oxide (iNO), high frequency oscillation (HFO), non invasive ventilation (NIV)).		<b>2</b>
<b>24. Readings</b>		
Lissauer T., Fanaroff A.: <b>Neonatology at glance. Blackwell Publishing 2<sup>nd</sup> Ed.</b> Cloherty J.P., Eichenwald E.C., Stark A.R.: Manual of Neonatal Care. Lippincott Williams&Wilkins Seidel H.M., Rosenstein B. J., Pathak A.: Primary Care of the Newborn. Mosby.		
<b>25. Detail evaluation criteria</b>		

In accordance with the recommendations of the inspection bodies

Completion of the course – student has achieved the assumed learning outcomes

Detail criteria for completion and evaluation of the course are specified in the course regulations