

## COURSE DESCRIPTION CHART

<b>Discipline code</b>	<b>12.6-3LEK-F-AiITDc</b>	
<b>Name of discipline</b>	Polish	<b>Anestezjologia i intensywne leczenie dziecięce</b>
	English	<b>Anaesthesiology and intensive paediatric care</b>

### 1. POSITION OF DISCIPLINE IN THE STUDY SYSTEM

<b>1.1. Study speciality</b>	medicine
<b>1.2. Form of study</b>	full-time
<b>1.3. Level of study</b>	uniform Master's study
<b>1.4. Profile of study</b>	practical
<b>1.5. Specialization</b>	lack
<b>1.6. Unit conducting the discipline</b>	Faculty of Medicine and Health Sciences UJK
<b>1.7. Person preparing course description chart</b>	dr n. med. Małgorzata Szerla
<b>1.8. Person responsible for the discipline</b>	Dr n. med. Małgorzata Szerla
<b>1.9. Person conducting the discipline</b>	Dr n. med. Małgorzata Szerla
<b>1.10. Contact</b>	malgorzata.szerla@ujk.edu.pl

### 2. GENERAL CHARACTERISTICS OF THE DISCIPLINE

<b>2.1. Affiliation to module</b>	facultative
<b>2.2. Status of discipline</b>	facultative
<b>2.3. Language of tuition</b>	English
<b>2.4. Semesters for performance of the discipline</b>	6-9 semesters of study to achieve the assumed clinical outcomes the student must possess knowledge of the essentials of medicine, which is obtained after 1-5 semesters of study
<b>2.5. Preliminary requirements</b>	anatomy, physiology, pathology, microbiology, immunology, pharmacology with toxicology, neurology, paediatrics, neonatology, surgery, paediatric surgery, gynaecology and obstetrics.

### 3. FORMS, WAYS AND METHODS OF CONDUCTING CLASSES

<b>3.1. Types of classes</b>	<b>LECTURES: 15 hours, CLASSES – 20 hours</b>	
<b>3.2. Way of conducting classes</b>	Lectures –in didactic rooms of the UJK Classes – Paediatric Anaesthesiology and Intensive Care Unit, Anaesthesiology Consultation Clinic; Department of Paediatric Surgery, Urology and Traumatology	
<b>3.3. Way of obtaining credits for classes</b>	<b>Credit with grade</b>	
<b>3.4. Didactic methods</b>	seminar, discussion, case study in natural conditions; participation in consultations and senior staff meetings	
<b>3.5. List of literature</b>	<b>basic</b>	1. Carl L. Gwinnutt: Lecture Notes: Clinical Anaesthesia, 3rd ed., Wiley Blackwell 2008 2. P. Marino: The ICU Book 3rd ed. Lippincot 2006 European Resuscitation Council Guidelines for Resuscitation 2010. Available at <a href="http://www.erc.edu">www.erc.edu</a>
	<b>supplementary</b>	1. Aitkenhead AR, Smith G, Rowbotham DJ. Textbook of Anaesthesia. 5th ed. Churchill Livingstone 2006 2. Smith T, Pinnock C, Lin T, Jones R. Fundamentals of Anaesthesia 3rd ed., Cambridge University Press, 2010,

#### 4. AIMS, PROGRAMME CONTENT AND EDUCATION OUTCOMES

##### 4.1. Aims

**C<sub>1</sub> – Acquisition of knowledge** concerning the specificity of paediatric anaesthesiology and intensive care (patients at developmental age) and risk management in interdisciplinary area of peri-operative medicine;

**C<sub>2</sub> – Teaching the skills of** anticipation, assessment and risk management, and optimization of peri-operative safety at all stages of management of a paediatric patient through peri-operative experience, i.e. during pre-hospitalization period, during and after hospitalization.

**C<sub>3</sub> – Teaching ethical, holistic and interdisciplinary approach** to the management of children during peri-operative period and in intensive care unit in accordance with the European Charter of Patients' Rights (2002) and the Helsinki Declaration on Patient Safety in Anaesthesiology (2010), and the Guidelines for safe anaesthesia of children by the Consultation Council of the Polish Association of Anaesthesiology and Intensive Care for the matters of Quality and Safety of Anaesthesia (2010).

##### 4.2. Programme content

LECTURES (lecture room at the UJK, conference room and/or seminar room at the Regional Polyclinical Hospital):

- Principles of optimization of safety and risk management in paediatric anaesthesiology and intensive care – dictated by age specificity of children at various periods of turbulent puberty and development (3 hours)
- Legal aspects concerning anaesthetizing paediatric patients: Guidelines for safe anaesthesia of children by the Consultation Council of the Polish Association of Anaesthesiology and Intensive Care for the Matters of Quality and Safety of Anaesthesia, Regulation by the Minister of Health of 10 November 2006 (Journal of Laws, No.06.213.1568 with later amendment of 08.30.187) (3 hours)
- Specificity of anaesthesia and intensive care in therapy of an infant: mature, pre-term, extremely immature with low birth weight (3 hours)
- Specificity of anaesthesia and intensive care in children with considerably elevated or extremely high peri-operative risk – children 'too ill' to undergo anaesthesia (3 hours)
- Ethics in neonatology and paediatrics – management with respect to a child with permanent life threatening incurable disease. Difficult and frank conversations with parents, whether to lavish an easy 'promise' of hope in intensive care. Palliative care an alternative for things which are impossible to fulfil. (3 hours)

PRACTICAL CLASSES (Anaesthesiology Consultation Clinic, Operating Block, Post-Operative Supervision Room –'awaking room', laboratories for imaging tests and endoscopy, paediatric intensive care ward):

- Qualification of children for planned surgical procedures – assessment of peri-operative risk according to the ASA classification (3 hours)
- Supervising paediatric patient at all stages of general and local anaesthesia, and analgosedation (3 hours).
- Supervising child after anaesthesia and assessment of the degree of awakening following anaesthesia, and evaluation of the degree of awakening from anaesthesia according to the Steward. Algorithm of post-operative care directly after the procedure and discharge from the Post-Operative Supervision Room (awakening room) (5 hours).
- Participation in making diagnosis, monitoring and intensive care of children with disorders of consciousness, respiration, circulatory, renal, multi-organ injuries, burns, in severe sepsis and in septic shock (6 hours).
- Clinical, laboratory and spirometric monitoring of respiratory failure treated using a respirator (3 hours).

Education outcomes in the discipline			
Code	Student who obtained credit	Degree of saturation of	Reference to education outcomes

		<b>outcome in discipline 1</b> [+] [++] [+++]	<b>for discipline</b>	<b>for area/<u>standard</u></b>
<b>within the scope of KNOWLEDGE:</b>				
W01	knows the most common life-threatening conditions in children and the rules of conduct in these states;	++	E.W6.	
W02	knows the principles concerning the treatment of pain, including cancer and chronic pain;	+	E.W29.	
W03	knows and understands the capabilities and limitations of laboratory tests in emergency situations;	+	E.W39.	
W04	knows eligibility rules as well as basic and most common complications of surgery and other invasive diagnostic and treatment procedures;	+	F.W3.	
W05	knows perioperative safety rules, preparing a patient for surgery, general and local anesthesia and controlled sedation	++	F.W4.	
W06	knows postoperative treatment and analgesic therapy as well as post-operative monitoring;	++	F.W5.	
W07	knows indications and rules for the application of intensive therapy;	++	F.W6.	
W08	knows the current guidelines for cardiopulmonary resuscitation of the newborns, children and adults;	++	F.W7.	
W09	knows the principles of the integrated state system of medical rescue;	+	F.W8.	
W10	knows the problem of surgical transplantation, indications for the transplantation of irreducibly damaged organs and tissues, and related procedures;	+	F.W14.	
W11	knows the rules concerning the diagnosis of brain death.	+	F.W15.	
<b>within the scope of SKILLS:</b>				
U01	conducts a review of medical history of the child and its family;	++	E.U2.	
U02	conducts physical examination of the child at any age;	+	E.U4.	
U03	performs differential diagnosis of the most common diseases in adults and children;	+	E.U12.	
U04	assesses and describes the somatic and mental state of patients;	+	E.U13.	
U05	recognizes states of a direct threat to life;	++	E.U14.	
U06	recognizes when a patient is under the influence of alcohol, drugs and other addictive products;	+	E.U15.	
U07	plans diagnostic, therapeutic and preventive procedures;	+	E.U16.	
U08	conducts analysis of the potential side effects of each drug and the interaction between them;	+	E.U17.	
U09	applies dietary treatment (including enteral and parenteral feeding);	+	E.U25.	
U10	implements the basic therapeutic procedure in acute poisoning;	+	E.U33.	

U11	monitors the status of a patient poisoned by chemical substances or drugs;	+	E.U34.	
U12	performs basic resuscitation with automated external defibrillator and other rescue activities and provides first aid;	++	F.U10.	
U13	acts in accordance with the current algorithm of advanced life support activities;	++	F.U11.	
U14	monitors the postoperative period basing on the basic parameters of life;	++	F.U12.	
U15	during child examination recognizes symptoms indicating the possibility of using violence against the child;	+	G.U5.	
U16	collects blood for toxicological studies and secures the material for hemogenetic research in accordance with given principles.	++	G.U7.	

#### 4.3. Criteria for evaluation of obtained education outcomes

Grade 3	Grade 3.5	Grade 4	Grade 4.5	Grade 5
<b>Lecture</b>				
Learning programme content on the basic level, replies chaotic, leading questions necessary.	Learning programme content on the basic level, answers systematized, requires assistance from the teacher.	Learning programme content on the basic level, answers systematized, independent. Solving of problems in typical situations.	The scope of presented knowledge exceeds the basic level based on the supplementary literature provided. Solving of problems in new complex situations	The scope of presented knowledge exceeds the basic level based on independently acquired scientific sources of information.
<b>Criteria for evaluation of oral answer</b>				
<ol style="list-style-type: none"> <li>1. Provision of a comprehensive answer to the problem (task)</li> <li>2. Skill of integration of knowledge from allied domains (disciplines)</li> <li>3. Independence and/or creativity in the presentation of the scope of problems, proposals of solutions</li> <li>4. Presentation of the current knowledge related with the discipline (domain)</li> <li>5. Recognition of problems resulting from the task</li> </ol>				
<b>Criteria for evaluation of written answer</b>				
<ol style="list-style-type: none"> <li>1. Compliance with the essence of the subject matter of work (task)</li> <li>2. Provision of a comprehensive answer to the problem (task)</li> <li>3. Skill of integration of knowledge from allied domains (disciplines)</li> <li>4. Independence and/or creativity in the presentation of the scope of problems</li> <li>5. Presentation of the current knowledge related with the discipline (domain), pertinent selection of literature</li> </ol>				

#### 4.4. Evaluation methods

Oral examination	Written examination	Project	Colloquium - with grade	Homework	Presentation Reports	Discussions	Others
			X		X	X	

## 5. TOTAL ECTS CREDIT POINTS – STUDENT'S WORK LOAD

Category	Student's work load full-time study
Participation in didactic classes specified in the study plan (contact hours)	<b>35</b>
- Participation in lectures	<b>15</b>
- Participation in classes, discussion sessions, laboratories, etc.	<b>20</b>
Participation in consultations/ PRACTICAL CLASSES	
Preparation for examination/participation in examination, final test, etc.	
Others	
Independent student's work (non-contact hours)	<b>15</b>
Preparation for lecture	
Preparation for classes, discussion sessions, laboratory, etc.	<b>10</b>
Preparation for examination/colloquium	<b>5</b>
Collection of material for the project, web query	
Elaboration of multimedia presentation	
Preparation of entry for wikipedia	
Others	
<b>Total number of hours</b>	<b>50</b>
<b>ECTS credit points for discipline</b>	<b>2</b>