COURSE DESCRIPTION CHART

Discipline code	**12.6-3LEK-C6.2-CO**	
Name of discipline	Polish	**Chirurgia ogólna**
	English	**General Surgery**

1. POSITION OF DISCIPLINE IN THE STUDY SYSTEM

1.1. Study speciality	medicine
1.2. Form of study	full-time
1.3. Level of study	uniform Master's study
1.4. Profile of study	General surgery
1.5. Specialization	lack
1.6. Unit conducting the discipline	Faculty of Medicine and Health Sciences, Department of General Surgery, Oncology and Endocrinology in Kielce
1.7. Person preparing course description chart	dr n. med. Jarosław Matykiewicz
1.8. Person responsible for the discipline	prof. zw. dr hab. n. med. S. Głuszek
1.9. Person conducting the discipline	prof. zw. dr hab. n. med. S. Głuszek
1.10. Contact	jaromaty@wp.pl

2. GENERAL CHARACTERISTICS OF THE DISCIPLINE

2.1. Affiliation to module	Surgical clinical sciences
2.2. Status of discipline	mandatory
2.3. Language of tuition	English
2.4. Semesters for performance of the discipline	5th - 10th
2.5. Preliminary requirements	Anatomy, Physiology

3. FORMS, WAYS AND METHODS OF CONDUCTING CLASSES

3.1. Types of classes		**LECTURE: 90 , CLASSES -90, PRACTICAL CLASSES:75**
3.2. Way of conducting classes		Lecture- Courses in the teaching rooms of the JKU Classes- Department of General Surgery, Oncology and Endocrinology Kielce
3.3. Way of obtaining credits for classes		**LECTURE – E, CLASSES – Credit with grade**
3.4. Didactic methods		• Multimedia presentations of the principles of diagnosis and treatment in surgery including surgical and outpatient procedures. • Seminars, lectures • Presentations of clinical cases
3.5. List of literature	**basic**	1. Principles and Practice of Surgery 6th Edition O. James Garden Andrew Bradbury John Forsythe Rowan W Parks; Churchill Livingstone, 28th May 2012
	supplementary	1. Step- Up to Surgery second edition. 2. Churchill's pocketbooks Surgery

4. AIMS, PROGRAMME CONTENT AND EDUCATION OUTCOMES

4.1. Aims

- Acquire knowledge on the surgical department work.
- Acquire knowledge on the doctor's work particulars at the surgical department.
- Acquire knowledge on the cooperation particulars during cooperation with a diagnostic laboratory, a radiological laboratory, a microbiological laboratory and an endoscopy laboratory.
- Acquire knowledge on particulars of preparing a patient to urgent and scheduled surgical procedures.
- Acquire knowledge on wound healing.
- Acquire knowledge on the injury impact on the organism and shock treatment.
- Acquire basic knowledge on nutrition treatment in surgery.
- Acquire basic knowledge on the most popular injuries: head injuries, neck injuries, chest and abdominal cavity injuries, limbs injuries and their results.
- Acquire basic knowledge on burns and frostbites and particulars of their dressing.
- Acquire basic knowledge on abdominal cavity surgical serious illnesses: acute appendicitis, acute cholecystitis, digestive tract obstruction, perforation of gastric or duodenal ulcer, peritonitis, hemorrhage into the digestive tract lumen.
- Acquire basic knowledge on the most popular cancers: lung cancer, breast cancer, colorectal cancer, stomach cancer.
- Acquire basic knowledge on: hernias, pancreatobiliary diseases, gallstone, portal hypertension and its complications.
- Acquire knowledge on the most popular endocrine system diseases – thyroid diseases, adrenal diseases, multiple cancers of endocrine glands.
- Acquire knowledge on the most popular peripheral vascular system: acute and chronic ischemia of lower limbs, aneurysm of the abdominal aorta, venous insufficiency of the lower limbs
- Acquire knowledge on particulars in surgical treatment of a coronary heart disease and a valvular heart disease.
- Acquire knowledge on the most popular complications in surgical treatment and particulars of their prevention.
- Acquire knowledge on particulars of organ transplantations.
- Acquire knowledge on metabolic surgery.
- Acquire knowledge on surgical infections treatments.

4.2. Programme content

Semester V -VI

Lectures

1. Metabolism in surgery, principles of fluid therapy.
2. Basic issues in surgery: wound, types of wounds, contusions, sprains, dislocations, fractures - diagnostic and therapeutic procedures.
3. Infections in surgery - hospital-acquired infection, prophylaxis of infections, principles of antibiotic therapy.
4. Shock: types, pathophysiology, recognition, treatment
5. The body's response to injury.
6. Head injuries: pathology of concussion, brain contusions, cerebral and intracerebral haematomas, cerebral edema - diagnosis and treatment.
7. Chest injuries: rib fractures, chest flaccid, pneumothorax, pleural hematoma, cardiac contusion - diagnosis and treatment.
8. Abdominal trauma: trauma to parenchymal organs, intestinal trauma, trauma to large vessels - diagnosis and treatment.
9. Burns and frostbites - recognition, treatment, burn disease and its metabolic consequences.
10. Surgical procedures: classic, laparoscopic, endoscopic

Classes/ practical classes

1. Composition of the system. Water and electrolyte balance. Principles of fluid therapy.
2. Shock - causes, diagnosis and treatment.
3. Wounds and their dressings, first aid in burns.
4. Surgical infections - collection of material for research, selection of treatment.
5. Surgical examination and i eligibility for surgery.

Semester VII -VIII

Lectures

Sem VII

1. Recognition and treatment of the most common diseases of the digestive system – Cholelithiasis and gallstones, acute inflammation of the pancreas, chronic pancreatitis, peptic ulcer disease, portal hypertension, inflammatory bowel disease.
2. Identification and treatment of the most common acute surgical diseases of the abdominal cavity - acute appendicitis, perforated stomach ulcer and duodenal ulcer, digestive tract obstruction , peritonitis; gastrointestinal bleeding.
3. Abdominal hernias treatment and surgical treatment.
4. Identification and treatment of the most common upper gastrointestinal tract cancers - gastro esophageal and gastric cancer.

Sem VIII

1. Diagnosis and treatment of colorectal cancer.
2. Diagnosis and surgical treatment of the endocrine glands diseases– thyroid gland, thyroid cancer, adrenal tumors, endocrine tumors syndromes.
3. Diagnosis and treatment of respiratory system diseases - lung cancer, tumours of the chest wall, mediastinal tumours.
4. Benign breast diseases and breast cancer - diagnosis and treatment.
5. Test/ Credit

Classes/ practical classes

Sem. VII - VIII

1. Preparing the Patient for Surgery: elements of mental, physical and pharmacological preparation, the problem of informed consent for surgery.
2. Acute abdominal surgical diseases - a discussion of clinical cases
3. The most common digestive system cancers - a discussion of clinical cases.
   Practical classes : discussing clinical cases according to the curriculum.

Sem VIII

1. The most common cancerous and non-cancerous diseases of the liver, gallbladder and biliary tract– a discussion of clinical cases.

2. The most common cancerous and non-cancerous diseases of the pancreas- a discussion of clinical cases.

3. The most common cancerous and non-cancerous diseases of the esophagus and stomach– a discussion of clinical cases.

4. The most common cancerous and non-cancerous diseases of the small and large intestine as well as anus– a discussion of clinical cases.

Semester IX- X

1. Surgical treatment of ischemic heart disease and heart valve defects.
2. Basics of transplantology - guidelines for heart transplantation, organ donation, ethical and legal problems.
3. Varices of lower limbs i chronic venous insufficiency – recognition and treatment.
4. Venous thromboembolism: recognition, treatment and prophylaxis.
5. Arterial embolism, arterial thrombosis, aortic aneurysms, atherosclerosis of the lower limbs.
6. Postoperative complications: infections, gastrointestinal fistula, cardiovascular complications, respiratory complications.
7. Parenteral and enteral nutrition in surgery: access to nutrition, principles of nutritional therapy and its monitoring.
8. Metabolic surgery: surgical treatment of obesity.
9. Surgery of the Future.

Classes/ practical classes

1. Medical complications of surgical treatment - discussion of clinical cases.
2. Peripheral vascular disease - a discussion of clinical cases.
3. Practical aspects of nutritional therapy in surgery.

4.3.**Education outcomes in the discipline**

Code	A student, who passed the course	Relation to teaching outcomes
within the scope of **KNOWLEDGE:**		
W01	knows and understand the causes, symptoms, principles of diagnosis and therapeutic management in relation to the most common diseases requiring surgical intervention, taking into account the individuality of childhood, in particular: a) acute and chronic diseases of the abdominal cavity, b) diseases of the chest, c) diseases of limbs and head, d) bone fractures and injuries of organs;	F.W1.
W02	knows eligibility rules as well as basic and most common complications of surgery and other invasive diagnostic and treatment procedures;	F.W3.
W03	knows the current guidelines for cardiopulmonary resuscitation of the newborns, children and adults;	F.W7.
W04	knows the issues concerning modern imaging tests, in particular: a) basic radiological symptomatology of diseases, b) instrumental methods and imaging techniques used to perform medical treatments, c) the indications, contraindications and preparation of patients to particular types of imaging tests and contraindications the use of contrast agents;	F.W10.
W05	knows the problem of surgical transplantation, indications for the transplantation of irreducibly damaged organs and tissues, and related procedures;	F.W14.

within the scope of **ABILITIES**:		
U01	assesses patient’s general condition, consciousness and awarenes;	E.U7.
U02	performs differential diagnosis of the most common diseases in adults and children;	E.U12.
U03	assesses and describes the somatic and mental state of patients;	E.U13.
U04	recognizes states of a direct threat to life;	E.U14.
U06	plans diagnostic, therapeutic and preventive procedures;	E.U16.
U07	conducts analysis of the potential side effects of each drug and the interaction between them;	E.U17.
U08	qualifies the patient for home treatment and hospitalization;	E.U20.
U09	defines states in which functional status of the patient's or his/her preferences restrict the treatment in accordance with specific guidelines for the disease;	E.U21.
U10	interprets laboratory tests/results and identifies the reasons for deviations;	E.U24.
U11	applies dietary treatment (including enteral and parenteral feeding);	E.U25.
U12	assists when the following procedures and medical treatments are performed: a) transfusions of blood and blood products, b) drainage ofthe pleural cavity, c) puncture of the pericardium, d) puncture of the peritoneal cavity, e) lumbar puncture, f) needle biopsy, g) epidermal tests, h) intradermal and scarification tests and interpret their results;	E.U30.
U13	plans specialist consultations;	E.U32.
U14	evaluates decubitus and applies appropriate dressings;	E.U35.
U15	acts correctly in the case of injuries (uses dressing or immobilization, stictches the wound);	E.U36.
U16	keeps medical records of the patient	E.U38.
U17	assists during a typical surgery, prepares the surgical site and locally anesthetizes operated area;	F.U1.
U18	uses basic medical tools	F.U2.
U19	complies with the aseptic and antiseptic rules;	F.U3.
U20	manages simple wounds and changes sterile surgical dressing;	F.U4.
U21	uses peripheral venous catheter;	F.U5.
U22	examines nipples, lymph nodes, thyroid gland and the abdominal cavity in terms of acute abdomen, and performs finger test through the anus;	F.U6.
U23	manages external bleeding;	F.U9.
U24	monitors the postoperative period basing on the basic parameters of life;	F.U12.
U25	assesses the condition of the unconscious patient in accordance with applicable international scales;	F.U21.
U26	recognizes the symptoms of increasing intracranial pressure;	F.U22.

4.4. Methods of assessment of the intended teaching outcomes

Teaching outcomes *(code)*	Method of assessment (+/-)																				
	Exam oral/written*			Test*			Project*			Effort in class*			Self-study*			Group work*			Others* Attendance		
	Form of classes			*Form of classes*			*Form of classes*			*Form of classes*			*Form of classes*			*Form of classes*			*Form of classes*		
	L	*C*	*PC*	*L*	*C*	*PC*	*L*	*C*	*PC*	*L*	*C*	*PC*	*L*	*C*	*PC*	*L*	*C*	*PC*	*L*	*C*	*PC*
W01	+			+	+					+									+		
W02	+			+						+									+		
W03	+			+						+									+		
W04	+			+						+									+		
W05	+			+						+									+		
U01					+	+		+	+		+	+								+	+
U02					+	+		+	+		+	+								+	+
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U04					+	+		+	+		+	+								+	+
U05					+	+		+	+		+	+								+	+
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U09					+	+		+	+		+	+								+	+
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U11					+	+		+	+		+	+								+	+
U12					+	+		+	+		+	+								+	+
U13					+	+		+	+		+	+								+	+
U14					+	+		+	+		+	+								+	+
U15					+	+		+	+		+	+								+	+
U16					+	+		+	+		+	+								+	+
U17					+	+		+	+		+	+								+	+
U18					+	+		+	+		+	+								+	+
U19					+	+		+	+		+	+								+	+
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U21					+	+		+	+		+	+								+	+
U22					+	+		+	+		+	+								+	+
U23					+	+		+	+		+	+								+	+
U24					+	+		+	+		+	+								+	+
U25					+	+		+	+		+	+								+	+
U26					+	+		+	+		+	+								+	+

delete as appropriate

4.5. Criteria of assessment of the intended teaching outcomes		
Form of classes	**Grade**	**Criterion of assessment**
lecture (L)	**3**	Test results 61%-68% points
	3,5	Test results 69%-76% points
	4	Test results 77%-84% points
	4,5	Test results 85%-92% points
	5	Test results 93%-100% points
classes (C)*	**3**	61%-68% Learning programme content on the basic level, replies chaotic, leading questions necessary.
	3,5	69%-76% Learning programme content on the basic level, answers systematized, requires assistance from the teacher.
	4	77%-84% Learning programme content on the basic level, answers systematized, independent. Solving of problems in typical situations.
	4,5	85%-92% The scope of presented knowledge exceeds the basic level based on the supplementary literature provided. Solving of problems in new complex situations
	5	93%-100% The scope of presented knowledge goes beyond the primary level based on independently gained scientific sources of information.
Practical classes*	**3**	61%-68% Learning programme content on the basic level, replies chaotic, leading questions necessary.
	3,5	69%-76% Learning programme content on the basic level, answers systematized, requires assistance from the teacher.
	4	77%-84% Learning programme content on the basic level, answers systematized, independent. Solving of problems in typical situations.
	4,5	85%-92% The scope of presented knowledge exceeds the basic level based on the supplementary literature provided. Solving of problems in new complex situations
	5	93%-100% The scope of presented knowledge goes beyond the primary level based on independently gained scientific sources of information.

- **Thresholds are valid from 2018/ 2019 academic year**

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)	**280**
- Participation in lectures	**90**
- Participation in classes, discussion sessions, laboratories, etc.	**60**
Participation in consultations/ PRACTICAL CLASSES	**90**
Preparation for examination/participation in examination, final test, etc.	
Others	
Independent student's work (non-contact hours)	**120**
Preparation for lecture	**10**
Preparation for classes, discussion sessions, laboratory, etc.	**80**
Preparation for examination/colloquium	**30**
Collection of material for the project, web query	
Elaboration of multimedia presentation	
Preparation of entry for wikipedia	
Others	
Total number of hours	**375**
ECTS credit points for discipline	**15**