Załącznik nr 5 do zarządzenia nr 189/2025

COURSE SPECIFICATION

Course code: 0912-7LEK-C-GS

Course title in Polish: Chirurgia ogólna
Course title in English: General surgery

1. Placement of the course within the study programme

1.1. Field of study	medicine
1.2. Mode of study	full-time
1.3. Level of study	uniform Master's study
1.4. Profile of study	General academic
1.5. Course specification author	Dr hab. n.med. Łukasz Nawacki
1.6. Contact	lukasz.nawacki@ujk.edu.pl

2. Generał characteristics of the course

2.1. Language of instruction	English
2.2. Entry requirements	Anatomy, physiology and pathophysiology; basic knowledge of pharmacology, microbiology and diagnostic imaging.

3. Detailed characteristics of the course

3.1. Type of classes	**LECTURE: 90 (including 9 hours of e-learning), CLASSES - 90 (including 8 hours of e-learning), PRACTICAL CLASSES:75**
3.2. Place of course delivery	• Lectures: UJK teaching rooms and approved online learning environment for designated e-learning units. • Seminars: UJK teaching rooms and/or hospital teaching rooms; designated e-learning seminars are delivered asynchronously. • Practical clinical classes: surgical wards, operating theatres, outpatient clinics, endoscopy units and other approved hospital units.
3.3. Form of assessment	4.1. Semester assessment of lectures and seminars • At the end of each semester, the learning outcomes and content assigned to lectures and seminars are assessed jointly by one integrated semester credit test. • The integrated semester credit covers the material delivered during both lectures and seminars in the relevant semester. • The grade obtained from the integrated semester credit is entered as the same grade for both the lecture and seminar components in the electronic student record, provided that the approved programme and system configuration contain separate graded records for these forms. • A student who receives a failing grade (2.0) from the integrated semester credit is entitled to one ordinary retake sitting. The retake covers the learning outcomes and content assigned to both lectures and seminars in the relevant semester. • The dates of the regular and retake semester credits are set so that both procedures are completed before the beginning of the relevant regular examination session, in accordance with the University Study Regulations. 4.2. Assessment of practical clinical classes • Practical clinical classes are assessed separately with a grade. • Assessment is based on attendance, preparation, active participation, professional conduct, achievement of the intended practical learning outcomes, patient examination, clinical reasoning, medical documentation and performance of required tasks under appropriate supervision.

	• Practical skills may be verified using direct observation, structured checklists, case discussion, a skills station or an OSCE-type assessment, depending on organisational conditions. 4.3. Final examination • In order to complete the General Surgery course, students are required to obtain passing grades in all course components, including lectures, seminars and practical clinical classes. • The final assessment of the achieved learning outcomes is a written examination in the form of a Single Best Answer (SBA) multiple-choice test covering the full scope of the General Surgery course. • Only students who have successfully completed and passed all required course components are eligible to sit the final examination. • Failure to obtain the required course credits before the beginning of the regular examination session results in loss of eligibility to sit the examination in that session and in a failing grade being recorded in accordance with the University Study Regulations. • The examination is conducted in accordance with the University Study Regulations and institutional assessment procedures. 4.4. Conditional enrolment following non-completion Important distinction Conditional enrolment in the next semester is not a conditional pass of General Surgery. The course remains outstanding until all required learning outcomes and assessment components have been completed. • A student who does not pass the required semester credit after the regular and retake sittings may apply to the Dean for conditional enrolment in the subsequent semester. • The decision is made exclusively by the Dean, upon the student's application and under the conditions specified in the University Study Regulations. • Conditional enrolment may be granted when the student has obtained at least two-thirds of the ECTS credits required in the preceding semester and the outstanding courses do not prevent continuation of the programme. • The Dean determines the deadline for completing the outstanding requirements and, after obtaining the opinion of the course instructor, decides whether the student must repeat the relevant classes. • Conditional enrolment is not available for a prerequisite course, following a failed committee credit or committee examination, or for the same outstanding course for which conditional enrolment was previously granted, except in the exceptional circumstances allowed by the Study Regulations.
3.4. Teaching methods	• Lectures: multimedia presentations, structured clinical reasoning, analysis of current standards and selected clinical cases. • Seminars: case-based learning, guided discussion, interpretation of diagnostic tests, student presentations and team-based problem solving. • Practical clinical classes: bedside teaching, participation in ward rounds and handovers, patient examination, medical documentation, simulation and supervised performance of basic surgical procedures, observation and assistance in operations where appropriate. • E-learning: structured learning materials, recorded presentations, clinical scenarios and assigned self-assessment activities.
3.5.a. Basic reading list	• Required: Tyler DS, ed. Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice. 22nd ed. Elsevier; 2026. ISBN 978-0-443-12434-1.
3.5.b. Supplementary reading list	Further reading: Cameron JL, Cameron AM, eds. Current Surgical Therapy. 14th ed. Elsevier; 2025. • Current international and national guidelines relevant to the topic of each class, as indicated by the instructor

4. Objectives, content and learning outcomes

4.1. Course objectives (taking into account the form of classes)

Lectures

C1. To provide systematic knowledge of general and visceral surgery, including pathophysiology, diagnostics and principles of treatment.

C2. To discuss patient qualification for surgery, preoperative preparation, perioperative safety, prevention and management of complications, and principles of postoperative recovery.

C3. To introduce students to modern surgical practice, including minimally invasive, robotic, endovascular and image-guided techniques, artificial intelligence, quality improvement and surgeon well-being.

Seminars

C1. To develop the ability to analyse clinical cases and interpret diagnostic tests using current standards and evidence-based medicine.

C2. To consolidate theoretical knowledge through discussion of practical clinical problems, including acute abdomen, infection, trauma, neoplasms and perioperative complications.

C3. To develop teamwork, clinical communication and the ability to formulate and justify diagnostic and therapeutic decisions.

Practical classes

C1. To develop competence in examining surgical patients, assessing clinical status and maintaining medical records.

C2. To acquire basic surgical and procedural skills, including wound suturing, dressing application, peripheral venous access and selected drainage-related tasks under supervision.

C3. To prepare students for safe participation in perioperative care and active assistance in typical surgical procedures, with particular attention to asepsis, ethics, teamwork and patient safety.

Transplantation is intentionally excluded from this course because it is delivered as a separate subject. The released teaching time has been reassigned to thoracic and cardiovascular surgery, ERAS/prehabilitation, and modern surgical quality and safety. The programme-learning-outcome matrix should be checked before final approval to confirm that the transplantation outcome is assigned to the separate Transplantation course.

4.2. Course content (taking into count the form of classes)

Semester V – Surgical Foundations

Lectures and integrated semester assessment – 15:

1. Introduction to modern surgery: safety, ethics, professionalism and evidence-based practice
2. Principles of asepsis, antisepsis and wound healing
3. Surgical infections, surgical site infection and chronic wounds
4. Diagnostic principles in surgery: history, examination, imaging and preoperative risk assessment
5. Diagnostic and therapeutic endoscopy
6. Integrated semester assessment: lectures and seminars

Seminars (15):

1. Surgical wound management and suturing techniques.
2. Surgical infections - case-based discussion

3. Surgical instruments and minor procedures in the ambulatory setting

4. Laboratory and microbiological diagnostics in surgery

5. Prognostic scales, perioperative risk assessment and informed consent

Practical clinical classes – 12 hours

Scope of practical classes

Patient history and examination; surgical handover and ward round; sterile technique; wound assessment; dressings; basic suturing; introduction to medical documentation.

Semester VI – Perioperative and Trauma Care

Lectures and integrated semester assessment – 15 hours

Semester VI – Perioperative and Trauma Care

1. Shock, fluid and electrolyte disturbances, and acid–base balance
2. Haemostasis, transfusion therapy and perioperative anticoagulation
3. Surgical access, tissue handling and principles of anastomotic techniques
4. Trauma: head and neurological injuries
5. Trauma: chest and abdominal injuries
6. Integrated semester assessment: lectures and seminars.

Seminars – 15 hours

1. Metabolic response to surgery and perioperative nutritional therapy

2. Acute abdomen – diagnostic and therapeutic approach

3. Peritonitis and intra-abdominal infections – case-based discussion

4. Prehabilitation, ERAS, prevention of postoperative complications and rehabilitation

5. Burns, frostbite and environmental injuries

Practical clinical classes - 12 hours

Scope of practical classes

Participation in emergency surgical care; peripheral venous access and basic supervised procedures; assessment of trauma and acute-abdomen patients; fluid balance; postoperative monitoring.

Semester VII - Gastrointestinal Surgery I

Lectures and integrated semester assessment – 15 hours

Lectures and integrated semester assessment – 15 hours

Lectures (15):

1. Abdominal wall hernias
2. Benign oesophageal diseases and oesophageal emergencies
3. Peptic ulcer disease and acute upper gastrointestinal bleeding
4. Oesophageal and gastric cancer
5. Primary liver and biliary tract malignancies
6. Integrated semester assessment: lectures and seminars

Seminars (15):

1. Anatomy and principles of inguinal hernia repair
2. Functional oesophageal disorders: achalasia, gastro-oesophageal reflux and hiatal hernia
3. Gastric outlet obstruction, duodenal lesions and selected rare foregut disorders
4. Liver abscess, chronic liver disease and portal hypertension
5. Gallstone disease, cholangitis and iatrogenic bile duct injuries

Practical clinical classes – 12 hours

Scope of practical classes

Abdominal examination; examination of patients with hernias; participation in endoscopy; observation of laparoscopic and open upper gastrointestinal, hepatobiliary and abdominal wall procedures.

Semester VIII – Gastrointestinal Surgery II

Lectures and integrated semester assessment – 15 hours

Lectures:

1. Acute and chronic pancreatitis
2. Pancreatic tumours
3. Small bowel diseases, obstruction and intestinal ischaemia
4. Colorectal cancer and inflammatory bowel disease
5. Benign anorectal disorders and proctology
6. Integrated semester assessment: lectures and seminars

Seminars (15):

1. Pancreatitis and pancreatic cancer – case-based discussion

2. Diseases of the spleen: trauma, tumours and splenectomy
3. Small bowel obstruction, intestinal ischaemia and acute appendicitis
4. Colorectal cancer versus inflammatory bowel disease – differential diagnosis
5. Anorectal diseases: abscesses, fistulas, haemorrhoids and fissures

Practical clinical classes – 12 hours

Scope of practical classes

Digital rectal examination; participation in colonoscopy; assessment and care of patients with stomas; observation of pancreatic, small bowel and colorectal operations; postoperative care.

Semester IX – Endocrine and Breast Surgery

Lectures and integrated semester assessment – 15 hours

1. Thyroid diseases: benign disorders and thyroid cancer
2. Parathyroid disorders
3. Adrenal surgery, neuroendocrine tumours and MEN syndromes
4. Diseases of the breast: benign and malignant
5. Bariatric and metabolic surgery
6. Integrated semester assessment: lectures and seminars

Seminars (15):

1. Thyroid nodules and complications of thyroid surgery
2. Thyroid cancer and parathyroid disease – case studies
3. Adrenal tumours, neuroendocrine disease and MEN – diagnostic approach
4. Breast lumps – clinical and imaging assessment
5. Bariatric surgery – qualification, methods and complications

Practical clinical classes – 12 hours

Scope of practical classes

Examination of the neck, thyroid, lymph nodes and breast; observation of thyroid, parathyroid, adrenal, breast and bariatric procedures; perioperative calcium and endocrine-related monitoring.

Semester X – Vascular, Thoracic and Cardiac Surgery

Lectures and integrated semester assessment – 15 hours

1. Aortic aneurysms and peripheral arterial occlusive disease
2. Venous disease and lymphatic disorders
3. Thoracic surgery: lung, chest wall, pleura and mediastinum

4. Cardiac surgery: coronary artery disease, valvular disease and pulmonary embolism

5. Modern surgery: robotics, artificial intelligence, endovascular techniques, quality improvement and surgeon well-being

6. Integrated semester assessment: lectures and seminars

Seminars (15):

1. Aortic disease – case-based discussion

2. Peripheral arterial disease and chronic venous insufficiency

3. Indications for cardiac surgery and common postoperative complications

4. Pleural disease, lung cancer and mediastinal lesions – case-based discussion

5. Ethics, health disparities, quality improvement and surgeon well-being

Practical clinical classes – 12 hours

Scope of practical classes

Vascular examination, pulse assessment and basic Doppler examination; assessment of patients with thoracic and cardiovascular disease; ward rounds; observation of vascular, thoracic and cardiac procedures; discussion of perioperative management and complications.

4.3. Course learning outcomes

Course learning outcomes (code)	Upon completion of the course, the student	Alignment with programme learning outcomes
in the area of knowledge knows and understands:		
W01	describes the causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases requiring surgical intervention, including acute and chronic abdominal diseases, diseases of the chest, and injuries of the head, limbs and internal organs.	F.W1
W02	explains the principles of qualification for basic operations and invasive diagnostic and therapeutic procedures, the conduct of these procedures and their most common complications.	F.W3
W03	describes current principles of cardiopulmonary resuscitation relevant to surgical emergencies in children and adults.	F.W7
W04	explains the role of modern imaging in surgery, including radiological features of common diseases, image-guided procedures, indications, contraindications, patient preparation and the use of contrast agents.	F.W10
in the area of skills knows how to:		
U01	assesses the patient’s general condition, consciousness and awareness.	E.U7
U02	performs differential diagnosis of the most common diseases in adults and children.	E.U12
U03	assesses and describes the patient’s somatic and mental status.	E.U13
U04	recognises conditions that pose an immediate threat to life.	E.U14
U05	plans diagnostic, therapeutic and preventive management.	E.U16

U06	analyses potential adverse effects and interactions of medicines used in perioperative care.	E.U17
U07	qualifies a patient for outpatient treatment or hospital admission.	E.U20
U08	recognises situations in which the patient's functional status or preferences limit treatment in accordance with disease-specific guidance.	E.U21
U09	interprets laboratory test results and identifies possible causes of abnormalities.	E.U24
U10	applies principles of nutritional treatment, including enteral and parenteral nutrition.	E.U25
U11	assists, within the scope of training and under supervision, during selected invasive procedures relevant to surgical care, including transfusion, pleural drainage, peritoneal puncture and needle biopsy.	E.U30
U12	plans appropriate specialist consultations.	E.U32
U13	assesses pressure injuries and selects appropriate dressings.	E.U35
U14	provides appropriate first-line management of injuries, including dressing, immobilisation and wound suturing under supervision.	E.U36
U15	maintains patient medical records.	E.U38
U16	assists during a typical operation, prepares the operative field and administers local anaesthesia to the operative site under appropriate supervision.	F.U1
U17	uses basic surgical instruments correctly and safely.	F.U2
U18	observes the principles of asepsis and antisepsis.	F.U3
U19	manages simple wounds and changes a sterile surgical dressing.	F.U4
U20	inserts and manages a peripheral venous catheter under supervision.	F.U5
U21	examines the breast, lymph nodes, thyroid gland and abdomen, assesses signs of an acute abdomen and performs a digital rectal examination.	F.U6
U22	controls external bleeding using appropriate first-line methods.	F.U9
U23	monitors the postoperative patient using basic vital parameters and recognises warning signs of deterioration.	F.U12
U24	assesses an unconscious patient using applicable international scales.	F.U21
U25	recognises clinical features of increasing intracranial pressure.	F.U22

in the area of social competences is able to:

K01	establish and maintain deep and respectful contact with the patient and show understanding towards ideological and cultural differences;	H.S1.
K02	do what is right for the patient;	H.S2.
K03	respect medical confidentiality and patient's rights;	H.S3.
K04	take actions concerning the patient on the basis of ethical principles, being aware of social conditions and restrictions resulting from illness;	H.S4.
K05	recognize his/her own limitations and self-evaluate educational deficiencies and needs;	H.S5.
K06	promote healthy lifestyle;	H.S6.
K07	use reliable information sources;	H.S7.
K08	conclude on the basis of own surveys and observations;	H.S8.
K09	introduce rules of social conduct and teamwork to the group of specialists, including specialists form other medical professions also in the multicultural and multinational environment;	H.S9.
K10	give opinions concerning various aspects of professional activity;	H.S10.
K11	take responsibility for own decisions made during professional activities including own safety and safety of other people;	H.S11.

4.4. Assessment methods for learning outcomes

Assessment method (+/-)

Course learning outcomes (code)	Oral/written/ practical examinaion /other (specify)*	Test*	Project*	In-class activity*	Independent study*	Group work*	Other (specify)*

Type of classes

1: / 2:	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…
…W01	+			+						+									+		
W02	+			+						+									+		
W03	+			+						+									+		
W04	+			+						+									+		
W05	+			+						+									+		
W06	+			+						+									+		
W07	+			+						+									+		
W08	+			+						+									+		
W09	+			+						+									+		
…U01					+			+	+		+	+								+	+
U02					+			+	+		+	+								+	+
U03					+			+	+		+	+								+	+
U04					+			+	+		+	+								+	+
U05					+			+	+		+	+								+	+
U06					+			+	+		+	+								+	+
U07					+			+	+		+	+								+	+
U08					+			+	+		+	+								+	+
U09					+			+	+		+	+								+	+
U10					+			+	+		+	+								+	+
U11					+			+	+		+	+								+	+
U12					+			+	+		+	+								+	+
U13					+			+	+		+	+								+	+
U14					+			+	+		+	+								+	+
U15					+			+	+		+	+								+	+
U16					+			+	+		+	+								+	+
U17					+			+	+		+	+								+	+
U18					+			+	+		+	+								+	+
U19					+			+	+		+	+								+	+
U20					+			+	+		+	+								+	+

U21					+			+	+		+	+								+	+
U22					+			+	+		+	+								+	+
U23					+			+	+		+	+								+	+
...K01																					+
K02																					+
K03																					+
K04																					+
K05																					+
K06																					+
K07																					+
K08																					+
K09																				+	+
K10																				+	+
K11																				+	+

Annotation. 1: form of classes; 2: learning outcomes

4.5. Assessment criteria for learning outcomes

Type of classes:

LECTURE (L) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	• **Grade 3.0 (Satisfactory):** Student has acquired basic knowledge, but answers are incomplete or require prompting. Limited ability to integrate knowledge. Written test score: **61–68%**.
3,5	• **Grade 3.5 (Satisfactory+):** Student demonstrates basic knowledge, answers are more systematic but still require some guidance. Written test score: **69–76%**.
4,0	• **Grade 4.0 (Good):** Student provides systematic, independent answers, demonstrates solid understanding and the ability to apply knowledge to typical clinical situations. Written test score: **77–84%**.
4,5	• **Grade 4.5 (Good+):** Student demonstrates knowledge beyond the core curriculum, uses supplementary literature, and is able to apply knowledge in non-standard situations. Written test score: **85–92%**.
5,0	• **Grade 5.0 (Very good):** Student has excellent, in-depth knowledge, integrates information critically, applies principles of evidence-based medicine (EBM), and demonstrates independence in problem-solving. Written test score: **93–100%**.

Type of classes:

SEMINAR (S) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	• **Grade 3.0:** Student's answers are chaotic, lacks logical structure, requires constant guidance; analysis of clinical cases possible only with assistance.
3,5	• **Grade 3.5:** Student presents basic knowledge, answers are more organized, solves typical clinical problems with partial assistance.
4,0	• **Grade 4.0:** Student demonstrates independent, systematic responses, can analyze standard clinical cases, and applies theory to practice.
4,5	• **Grade 4.5:** Student shows above-average knowledge, integrates literature, and is able to solve new and complex clinical problems.
5,0	• **Grade 5.0:** Student demonstrates critical thinking, independence, and uses EBM principles in analyzing cases; presents knowledge beyond core requirements.

Type of classes:

OTHER (...) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	• **Grade 3.0:** Student has mastered only basic skills, performs procedures with difficulty, requires constant supervision and prompting.
3,5	• **Grade 3.5:** Student carries out basic procedures correctly but with partial assistance; can examine the patient and perform simple tasks.
4,0	• **Grade 4.0:** Student independently performs most typical procedures (suturing, dressings, catheterization, peripheral IV insertion), correctly examines patients, and maintains medical records.
4,5	• **Grade 4.5:** Student shows high manual skills, independence, avoids errors, actively participates in operations and patient care, integrates aseptic and ethical principles.
5,0	• **Grade 5.0:** Student performs procedures efficiently, critically evaluates their actions, actively assists in operations, demonstrates professional culture and teamwork skills.

5. ECTS credit allocation – student workload

Category	Student workload (full-time mode)
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER (CONTACT HOURS)	**260**
Participation in lectures*	86
Participation in seminars/laboratories*	157
Other (specify) e.g. classes conducted with the use of distance learning methods and techniques*	17
INDEPENDENT STUDY (NON-CONTACT HOURS)	**140**
Preparation for lectures*	70
Preparation for seminars/laboratories*	70
TOTAL HOURS	**400**
ECTS CREDITS for the course	**16**

*** delete as appropriate**

Approved for implementation (date and legible signatures of course instructors in the given academic year):

……..