Appendix No. 10.1. to Resolution No. 342/06/2024 of the Senate of the UR

of June 27, 2024

GENERAL INFORMATION ABOUT THE FIELD OF STUDY

Effective from the 2025/2026 academic year

1.	**Name of the field of study**	Medicine
2.	**Level of studies**	Uniform Master's degree studies
3.	**Profile of studies**	General academic
4.	**Form or forms of study**	Full-time/part-time
5.	**Number of semesters**	12
6.	**Number of ECTS credits required to complete studies at a given level**	360
7.	**Professional title**	Medical doctor
8.	**Assignment of the field of study to a scientific or artistic discipline (specifying the percentage share in the case of assignment of the field of study to more than one discipline and indicating the leading discipline within which will be obtained over half of the learning outcomes learning outcomes)**	Field: medical sciences and health sciences
9.	**Differences in relation to other programs with similarly defined learning objectives and outcomes, conducted at the University and assigned to the same discipline**	Not applicable
10.	**Description of the graduate profile, including a description of the general educational objectives and employment and further study opportunities**	Graduates of the medical program know and understand both physiological and pathological processes in the human body, are able to diagnose diseases and apply appropriate therapeutic methods. Their actions are based on ethical principles. In terms of skills, graduates are able to effectively recognize medical problems, plan and interpret diagnostic results, and implement appropriate therapies. They are ready for continuous professional development through active participation in educational processes and critical analysis of scientific research results. Their social skills include the ability to communicate effectively with patients and the medical team, as well as respect for cultural and worldviews. Graduates of the are aware of their limitations, able to make responsible decisions and promote healthy behaviors in society. Graduates of the medical program receive a diploma and the professional title of doctor. They are prepared to practice medicine in a professional, ethical, and responsible manner, taking into account the needs of the patient and social welfare. After completing their studies, they take the Final Medical Examination, and after passing it, they obtain the right to practice medicine, entitling them to work in health care facilities as well as in research centers, academic centers, and clinics at medical universities. Completing the program

		allows them to improve qualifications, knowledge, and skills through medical specializations and supplementary and further training courses in various medical fields, as well as continuing education at a doctoral school.
11.	**Language of instruction**	Polish and English (English Division)

President of the Senate

of the University of Rzeszów

Prof. Sylwester Czopek, PhD Rector

Appendix No. 10.2. to Resolution No. 342/06/2024 of the Senate of the UR

of June 27, 2024

DESCRIPTION OF EXPECTED LEARNING OUTCOMES

Effective from the 2025/2026 academic year

Name of the field of study	Medicine
Level of studies	Uniform master's degree studies
Profile	General academic

The description of the intended learning outcomes for the field of study, level, and profile of education is consistent with Appendix 1 to the Regulation of the Minister of Science and Higher Education of July 26, 2019 on the standards of education preparing for the professions of doctor, dentist, pharmacist, nurse, midwife, laboratory diagnostician, physiotherapist, and paramedic (i.e. Journal of Laws 2021, item 755, as amended).

Symbol for directional learning effects ones	**Learning outcomes**
Knowledge: the graduate knows and understands	
A.W1.	the structure of the human body in a topographical and functional approach, including the topographical relationships between individual organs, together with anatomical, histological, and embryological nomenclature;
A.W2.	cellular structures and their functional specializations;
A.W3.	microarchitecture of tissues, extracellular matrix, and organs;
A.W4.	stages of human embryo development, structure and function of fetal membranes and placenta, stages of development of individual organs, and the impact of harmful factors on embryo and fetal development (teratogens).
B.W1.	water and electrolyte balance in biological systems;
B.W2.	acid-base balance and the mechanism of action of buffers and their significance in systemic homeostasis;
B.W3.	The concepts of solubility, osmotic pressure, isotonicity, colloidal solutions and Gibbs-Donnan equilibrium;
B.W4.	physical laws describing fluid flow and factors affecting vascular resistance to blood flow;
B.W5.	natural and artificial sources of ionizing radiation and its interaction with matter;
B.W6.	physicochemical and molecular basis of sensory organ function;
B.W7.	physical basis of non-invasive imaging methods;
B.W8.	physical basis of selected therapeutic techniques;
B.W9.	the structure of lipids and polysaccharides and their functions in cellular and extracellular structures;
B.W10.	I-, II-, III- and IV-order structures of proteins and post-translational modifications and functional modifications of proteins and their significance;
B.W11.	functions of nucleotides in the cell, first- and second-order structures of DNA and RNA, and chromatin structure;
B.W12.	the functions of the human genome, transcriptome, and proteome, and the methods used in their study, processes of DNA replication, repair, and recombination, transcription and translation, and degradation of DNA, RNA, and proteins, as well as concepts of gene expression regulation;
B.W13.	basic catabolic and anabolic pathways, methods of their regulation and their influence on genetic and environmental factors;
B.W14.	basic methods used in laboratory diagnostics, including protein and nucleic acid electrophoresis;
B.W15.	metabolic changes occurring in organs and the metabolic, biochemical and molecular basis of diseases and therapies;
B.W16.	methods of communication between cells and between cells and the extracellular

	matrix, as well as signal transduction pathways within cells, and examples of disorders in these processes leading to the development of cancer and other diseases;
B.W17.	processes: cell cycle, proliferation, differentiation and aging of cells, apoptosis and necrosis, and their importance for the functioning of the organism;
B.W18.	functions and applications of stem cells in medicine;
B.W19.	basics of excitation and conduction in the nervous system and higher nerve functions, as well as the physiology of striated and smooth muscles;
B.W20.	the functioning and regulatory mechanisms of all organs and systems of the human body and the relationships between them;
B.W21.	processes occurring during the aging of the body and changes in organ function associated with aging;
B.W22.	basic quantitative parameters describing the efficiency of individual systems and organs, including normal ranges and demographic factors affecting the value of these parameters;
B.W23.	basic IT and biostatistical tools used in medicine;
B.W24.	basic methods of statistical analysis used in population and diagnostic research;
B.W25.	the possibilities of modern telemedicine as a tool to support the work;
B.W26.	principles of conducting scientific research for the development of medicine;
C.W1.	normal human karyotype and various types of sex determination;
C.W2.	genetic causes of hereditary predisposition to cancer;
C.W3.	principles of inheritance of different numbers of traits, inheritance of quantitative traits, independent inheritance of traits, and inheritance of extra-nuclear genetic information;
C.W4.	genetic determinants of human blood groups and serological conflict in the Rh system;
C.W5.	genetic determinants of the most common single-gene, multigenic and multifactorial diseases, basic chromosomal aberration syndromes chromosomal syndromes, syndromes caused by genomic rearrangements, polymorphisms, epigenetic and post-transcriptional changes;
C.W6.	factors influencing the primary and secondary genetic equilibrium of populations;
C.W7.	genetic determinants of congenital malformations and selected rare diseases and the possibility of their prevention;
C.W8.	methods of genetic diagnosis and basic indications for their use;
C.W9.	genetic mechanisms of drug resistance acquired by microorganisms and cancer cells and their relationship to the need for individualized pharmacotherapy;
C.W10.	Microorganisms, including pathogenic microorganisms, microorganisms constituting the human microbiome, and forms or developmental stages of selected parasites that are invasive to humans developmental stages of selected parasites;
C.W11.	epidemiology of infections caused by viruses, bacteria, fungi, and prions and parasitic infections, including the geographical range of their occurrence;
C.W12.	the pathogenesis and pathophysiology of infections and infestations, and the impact of pathogenic factors such as viruses, bacteria, fungi, prions, and parasites on the human body and population, including the ways in which they interact, the consequences of exposure to them, and the principles of prevention;
C.W13.	the consequences of human exposure to chemical and physical agents physical factors and the principles of prevention;
C.W14.	etiology, pathogenesis, pathophysiology, transmission routes, forms, and prevention of iatrogenic infections;
C.W15.	methods used in microbiological and parasitological diagnostics (indications, rules for performing the test, interpretation of results);
C.W16.	principles of diagnosis of infectious, allergic, autoimmune, and neoplastic diseases, as well as blood diseases, based on the antigen-antibody reaction;
C.W17.	principles of disinfection, sterilization, and aseptic procedures;
C.W18.	specific and non-specific mechanisms of humoral and cellular immunity;
C.W19.	the main tissue compatibility system;

C.W20.	types of hypersensitivity reactions, types of immunodeficiency, and the basis of immunomodulation;
C.W21.	issues in the field of immunology of cancer and immune-mediated diseases and the principles of immunotherapy;
C.W22.	genetic basis for donor and recipient selection and the basics of transplant immunology transplantation;
C.W23.	clinical course of specific and non-specific inflammations and regeneration processes tissues and organs;
C.W24.	etiology, mechanisms, and consequences of hemodynamic disorders;
C.W25.	organ pathology, macro- and microscopic pathomorphological changes and clinical consequences, including pathomorphological nomenclature;
C.W26.	the pathogenesis of diseases, including genetic and environmental factors;
C.W27.	pathomechanism and clinical forms of the most common diseases of individual systems and organs, metabolic diseases, and disorders of water-electrolyte, hormonal, and acid-base balance disorders;
C.W28.	individual groups of medicinal products, their mechanisms and effects, basic indications and contraindications, and basic pharmacokinetic and pharmacodynamic parameters;
C.W29.	physiological and pathological conditions of absorption, metabolism, and elimination of drugs by the human body;
C.W30.	Basic principles of pharmacotherapy with taking into account its effectiveness and safety, the need for individualization of treatment, in including that resulting from pharmacogenetics;
C.W31.	major adverse drug reactions, interactions, and polypharmacy issues;
C.W32.	the problem of drug resistance, including multidrug resistance, and the principles rational antibiotic therapy;
C.W33.	possibilities and types of biological, cellular, gene and targeted therapies for specific diseases;
C.W34.	basic concepts in general toxicology;
C.W35.	groups of drugs which abuse can lead to poisoning;
C.W36.	symptoms of the most common acute poisonings with selected groups of drugs, alcohols and other psychoactive substances, mushrooms, and heavy metals;
C.W37.	basic principles of diagnostic and therapeutic management in poisoning;
C.W38.	the impact of oxidative stress on cells and its significance in the pathogenesis diseases and in the processes occurring during the aging of the body;
C.W39.	consequences of vitamin and mineral deficiencies and excesses;
C.W40.	causes and consequences of poor nutrition, including long-term insufficient and excessive food consumption and an unbalanced diet, as well as digestive and absorption disorders;
C.W41.	basics of radiotherapy;
C.W42.	molecular basis of cancer and issues in the field of cancer immunology;
C.W43.	practical elements of molecular biology and immunology used in the diagnosis and treatment of oncological diseases.
D.W1.	psychophysical development of humans from birth to death, taking into account the specifics of physical, emotional, cognitive, and social development;
D.W2.	concepts of health and disease, the impact of the social environment (family, work, social relations) and socio-cultural conditions (origin, social status, religion, nationality, and ethnic group) on the patient's health;
D.W3.	human behaviors conducive to maintaining health and principles of motivating patients to engage in pro-health behaviors (Prochaska and DiClemente's model of change, motivational interview);
D.W4.	the concept of stress, including eustress and distress, and the impact of stress on the etiopathogenesis and course of somatic diseases and mental disorders, and mechanisms of coping with stress;
D.W5.	social attitudes towards illness, disability, and old age, and the specific impact of stereotypes, prejudices, and discrimination;
D.W6.	the concept of empathy and the phrases and behaviors used to express it;

D.W7.	the specificity and role of verbal communication (conscious construction of messages) and non-verbal communication (e.g., facial expressions, gestures, managing silence and space);
D.W8.	psychosocial consequences of acute and chronic illness in children, including adolescents and adults;
D.W9.	psychosocial consequences of hospitalization of children, including adolescents, and adults in emergency situations and chronic diseases;
D.W10.	psychosocial consequences of the disease for the patient's family (family with a sick child, including a teenager, adult, and elderly person);
D.W11.	the role of the patient's family in the process of illness (diagnosis of the disease, adaptation to the disease, recovery) and ways of coping in difficult situations (disease progression, dying process, mourning);
D.W12.	problematic use of psychoactive substances and addiction to them, as well as behavioral addictions, methods of conducting brief interventions for people who use psychoactive substances problematically, mechanisms of addiction formation, and goals and methods of treating addicted individuals, as well as effective prevention strategies, psychosomatic disorders occurring in people in close relationships with an addicted person and methods of therapeutic treatment;
D.W13.	forms of violence, including domestic violence, social determinants of various forms of violence and the role of the physician in its diagnosis, as well as rules of conduct in cases of suspected violence, taking into account the "Blue Card" procedure;
D.W14.	the concept of normality and pathology in sexual behavior;
D.W15.	the concept of humanism in medicine and the main concepts, theories, and ethical principles serving as a general framework for the proper interpretation and analysis of moral and medical issues;
D.W16.	patient rights and the concept of patient welfare;
D.W17.	the philosophy of palliative care and its importance in the context of patient care at all stages of serious illness and dignified death;
D.W18.	the history of medicine, the characteristics of modern medicine, and the most important discoveries and achievements of leading representatives of Polish and world medicine;
D.W19.	the basics of evidence-based medicine;
D.W20.	the concepts of patient safety and safety culture and their aspects: organizational, communication, and management.
E.W1.	principles of breastfeeding, nutrition for healthy children and prevention of obesity, as well as dietary modifications resulting from diseases;
E.W2.	principles of prevention of diseases occurring in children, including examinations screening tests, check-ups, and vaccinations;
E.W3.	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases occurring in children and their complications: 1) rickets, tetany, water-electrolyte and acid-base balance disorders, 2) heart defects, myocarditis, endocarditis, and pericarditis, cardiomyopathy, cardiac arrhythmias, heart failure, hypertension, pulmonary hypertension, syncope; 3) respiratory diseases and allergies, including congenital respiratory defects, bronchiectasis, respiratory infections, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, atopic dermatitis, anaphylactic shock, angioedema; 4) anemia, hemorrhagic diathesis, bone marrow failure, childhood cancers, including solid tumors typical of childhood, primary and secondary immunodeficiencies; 5) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal bleeding, peptic ulcer disease, inflammatory bowel disease, intestinal diseases, pancreatic diseases, cholestasis, liver diseases, food allergies, congenital defects of the gastrointestinal tract; 6) acute kidney injury, chronic kidney disease, urinary tract infections, urinary

	disorders, congenital defects of the urinary tract, vesicoureteral reflux disease, kidney stones, glomerular diseases, tubulointerstitial diseases (tubulopathies, tubular acidosis), genetically determined kidney diseases, renovascular hypertension; 7) growth disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, puberty disorders, gonadal dysfunction; 8) cerebral palsy, encephalitis and meningitis, convulsions, epilepsy; 9) the most common infectious diseases of childhood; 10) systemic connective tissue diseases, including juvenile idiopathic arthritis, systemic lupus erythematosus, dermatomyositis, systemic vasculitis, and other causes of musculoskeletal pain (non-inflammatory, infectious, and reactive arthritis and juvenile spondyloarthropathies);
E.W4.	issues of child abuse and child sexual abuse and rules for intervention in such patients;
E.W5.	issues of mental retardation, behavioral disorders, psychoses, addictions, autism spectrum disorders, eating and excretion disorders in children;
E.W6.	basic methods of fetal diagnosis and therapy;
E.W7.	environmental and epidemiological determinants, causes, symptoms, principles of diagnosis and therapeutic management of the most common internal diseases occurring in adults and their complications: 1) cardiovascular diseases, including ischemic heart disease, heart defects, endocardial diseases, heart muscle diseases, pericardial diseases, heart failure (acute and chronic), arterial and venous diseases, hypertension (primary and secondary), pulmonary hypertension; 2) respiratory diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, asthma, bronchiectasis, cystic fibrosis, respiratory infections, tuberculosis, interstitial lung disease, pleural disease, mediastinal disease, obstructive and central sleep apnea, respiratory failure (acute and chronic), respiratory tract tumors; 3) diseases of the digestive system, including diseases of the mouth, esophagus, stomach and duodenum, intestines, pancreas, liver, bile ducts and gallbladder, digestive system cancers; 4) endocrine system diseases, including diseases of the hypothalamus and pituitary gland, thyroid, parathyroid glands, adrenal cortex and medulla, ovaries and testicles, as well as neuroendocrine tumors, multiple endocrine neoplasia syndromes, various types of diabetes, metabolic syndrome, obesity, dyslipidemia and hypoglycemia, tumors of the ovaries, testes and thyroid gland, neuroendocrine tumors; 5) kidney and urinary tract diseases, including acute kidney injury and chronic kidney disease in all stages and their complications, glomerular diseases (primary and secondary, including nephropathy diabetes and systemic diseases) and interstitial kidney diseases, renovascular hypertension, renal cysts, nephrolithiasis, urinary tract infections (upper and lower tract), kidney diseases during pregnancy, urinary tract cancers – kidney, bladder, and prostate cancers; 6) hematopoietic system diseases, including bone marrow aplasia, anemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute and chronic leukemias, myelomas, myeloproliferative and lymphoproliferative neoplasms, myelodysplastic syndromes, bleeding disorders, thrombophilia, blood disorders in diseases of other organs; 7) rheumatic diseases, including systemic connective tissue diseases (rheumatoid arthritis, early arthritis, systemic lupus erythematosus, Sjögren's syndrome, sarcoidosis, systemic sclerosis, idiopathic inflammatory myopathies), spondyloarthropathies, crystallopathies, erythema nodosum, infectious arthritis infectious agents, vasculitis, and non-inflammatory diseases of the joints and bones (osteoarthritis, soft tissue rheumatism, osteoporosis, fibromyalgia), soft

	tissue and bone sarcomas; 8) allergic diseases, including anaphylaxis and anaphylactic shock, and angioedema; 9) water-electrolyte and acid-base disorders (dehydration, hyperhydration, electrolyte imbalances, acidosis and alkalosis);
E.W8.	principles of pharmacotherapy in patients with renal failure and renal replacement therapy renal replacement therapy;
E.W9.	principles of nutritional treatment and fluid therapy in various medical conditions;
E.W10.	the course and symptoms of the aging process and the principles of comprehensive geriatric assessment and interdisciplinary care in relation to the elderly;
E.W11.	differences in clinical symptoms, diagnosis, and treatment of the most common diseases affecting older people;
E.W12.	risks associated with the hospitalization of older people;
E.W13.	basic principles of organizing care for the elderly and the burden of a caregiver for the elderly;
E.W14.	types of vascular access and their use, particularly in oncology;
E.W15.	basic neurological symptom syndromes;
E.W16.	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common neurological diseases and their complications: 1. headaches, including migraines, tension headaches and headache syndromes, and trigeminal neuralgia; 2. cerebrovascular diseases, in particular stroke; 3. epilepsy; 4. infections of the nervous system, in particular meningoencephalitis, Lyme disease, herpes encephalitis, neurotransmission diseases; 5. dementia, in particular Alzheimer's disease, frontal dementia, vascular dementia and other dementia syndromes; 6. basal ganglia diseases, in particular Parkinson's disease; 7. demyelinating diseases, in particular multiple sclerosis; 8. neuromuscular diseases, in particular amyotrophic lateral sclerosis lateral amyotrophic sclerosis, sciatica, compressive neuropathies; 9. cranial and cerebral injuries, in particular concussion; 10. neoplasms;
E.W17.	general symptomatology of mental disorders and principles of their classification according to the main classification systems;
E.W18.	environmental and epidemiological determinants, causes, symptoms, principles of diagnosis and therapeutic management of the most common psychiatric disorders and their complications: 1) schizophrenia; 2) affective disorders; 3) neurotic and adjustment disorders; 4) eating disorders; 5) disorders related to the use of psychoactive substances; 6) sleep disorders; 7) dementia; 8) personality disorders;
E.W19.	suicidal behavior;
E.W20.	the specifics of mental disorders and their treatment in children, including adolescents, and the elderly;
E.W21.	symptoms of mental disorders in the course of somatic diseases, their impact on the course of the underlying disease and prognosis, and the principles of their treatment;
E.W22.	issues related to human sexuality and basic disorders associated with it;

E.W23.	legal regulations concerning mental health protection, with particular regulations concerning the protection of mental health, with particular
E.W24.	issues in the field of oncology, including: 1) genetic, environmental, and epidemiological factors, causes, symptoms, principles of diagnosis and therapeutic management in the most common cancers and their complications; 2) the most common paraneoplastic syndromes and their clinical symptoms; 3) basics of early cancer detection, screening principles, and preventive measures in oncology; 4) the possibilities and limitations of modern cancer treatment (surgical methods, radiotherapy, and systemic methods, including immunotherapy), indications for cell and gene therapy, and targeted and personalized treatment; 5) early and late complications of cancer treatment; 6) the role of supportive care, including nutritional support; 7) principles of organizing care for oncology patients, including genetic counseling and multidisciplinary care; 8) practical aspects of statistics in oncology, including rules for interpreting clinical trial results; 9) the most important scales and classifications used in oncology; 10) principles of conducting targeted physical examinations of adults in the breast and prostate areas; 11) principles planning of therapeutic and therapeutic and preventive procedures in the treatment of cancer based on test results and medical documentation provided;
E.W25.	the principles of qualifying for palliative care and therapeutic procedures in the most common problems in palliative medicine, including in: 1) symptomatic treatment of the most common somatic symptoms; 2) management of cancer cachexia and prevention and treatment of pressure ulcers; the most common emergencies in palliative medicine;
E.W26.	principles of palliative care applied to patients suffering from serious illness, including terminal illness;
E.W27.	classification of pain (acute and chronic or nociceptive, neuropathic and nocicplastic) and its causes, pain assessment tools, and principles of its pharmacological and non-pharmacological treatment;
E.W28.	the concept of disability;
E.W29.	the role of medical rehabilitation and the methods used in it;
E.W30.	indications for medical rehabilitation in the most common diseases;
E.W31.	basic issues of prevention and rules of conduct in the event of occupational exposure to hazardous and harmful factors;
E.W32.	rules of conduct in the event of suspected or detected infectious disease;
E.W33.	environmental and epidemiological conditions, causes, symptoms, principles diagnosis and therapeutic and preventive treatment of the most common infectious diseases and their complications: 1) bacterial diseases, including streptococcal, staphylococcal, pneumococcal and meningococcal infections, whooping cough, tuberculosis, Lyme disease, and gastrointestinal tract infections; 2) viral diseases, including respiratory and gastrointestinal infections, viral hepatitis, infections with Herpesviridae, human immunodeficiency virus and neurotropic viruses; 3) parasitic diseases, including giardiasis, amoebiasis, toxoplasmosis, malaria, toxocariasis, trichinosis, ascariasis, tapeworm infection, and pinworm infection;

	4) fungal infections, including candidiasis, aspergillosis, and pneumocystosis; 5) hospital-acquired infections;
E.W34.	rules of conduct in case of exposure to potentially infectious material;
E.W35.	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common and sexually transmitted diseases;
E.W36.	causes, symptoms, principles of diagnosis and therapeutic management and in the most common genetically determined diseases in children and adults;
E.W37.	environmental and epidemiological determinants, causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases in general practice;
E.W38.	principles of healthy behavior, basics of prevention and early detectability of the most common lifestyle diseases and screening guidelines for these diseases;
E.W39.	types of biological materials used in laboratory diagnostics and the principles of collecting material for testing;
E.W40.	possibilities and limitations of laboratory tests;
E.W41.	indications for the implementation of monitored therapy;
E.W42.	indications for treatment with blood components and rules for their administration;
F.W1.	causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases requiring surgical treatment in adults: 1. acute and chronic diseases of the abdominal cavity; 2. chest diseases; 3. diseases of the limbs, head, and neck; 4. bone fractures and organ injuries; 5. tumors;
F.W2.	causes, symptoms, principles of diagnosis and therapeutic management therapeutic management of the most common congenital defects and diseases requiring surgical treatment in children;
F.W3.	basic classic and minimally invasive surgical techniques;
F.W4.	rules for qualifying for basic surgical procedures and invasive diagnostic and therapeutic procedures, and the most common complications;
F.W5.	the most common complications of modern oncological treatment;
F.W6.	principles of perioperative safety, preparation of the patient for surgery, administration of general and local anesthesia, and controlled sedation;
F.W7.	principles of postoperative treatment with pain management and postoperative monitoring;
F.W8.	indications and principles of intensive care;
F.W9.	guidelines for cardiopulmonary resuscitation of newborns, children, and adults;
F.W10.	the most common life-threatening conditions in children and adults and the principles of management in these conditions, in particular in: 1. sepsis; 2. shock; 3. hemorrhages; 4. water-electrolyte and acid-base disorders; 5. poisoning; 6. burns, hypo- and hyperthermia; 7. other acute conditions of a) cardiovascular, b) respiratory, c) neurological, d) renal, e) oncological and hematological, f) diabetes and endocrinology, g) psychiatric, h) ophthalmological,

	i) ENT, j) gynecological, obstetric, and urological;
F.W11.	rules of conduct in cases of suspected sexual violence;
F.W12.	principles of operation of the integrated State Medical Rescue System;
F.W13.	invasive methods of pain treatment;
F.W15.	Reproductive functions in women, disorders associated with them, and diagnostic and therapeutic procedures concerning in particular: 1) the menstrual cycle and its disorders; 2) pregnancy; 3) physiological childbirth, pathological childbirth, and the postpartum period; 4) inflammation and tumors within the reproductive organs; 5) birth control and fertility assistance; 6) menopause; 7) basic diagnostic methods and gynecological procedures;
F.W16.	male reproductive functions and related disorders, as well as diagnostic and therapeutic procedures diagnostic and therapeutic procedures;
F.W17.	issues related to currently used imaging tests, in particular: 1. radiological symptomatology of basic diseases; 2. instrumental methods and imaging techniques used to perform medical procedures; 3. indications, contraindications, and patient preparation for specific types of imaging examinations and contraindications for the use of contrast agents;
F.W18.	issues related to diseases of the eye, in particular: 1. causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases of the eye; 2. ophthalmic complications of systemic diseases, including their symptoms and methods of treatment in such cases; 3. surgical management of specific eye diseases; 4. groups of systemic drugs associated with ophthalmic complications and contraindications, and their mechanism of action;
F.W19.	issues in the field of otolaryngology, phoniatrics, and audiology, in particular: 1. causes, symptoms, principles of diagnosis and therapeutic management in diseases of the ear, nose, paranasal sinuses, mouth, throat, and larynx; 2. diseases of the facial nerve and selected structures of the neck; 3. principles of diagnosis and treatment of mechanical injuries mechanical injuries of the ear, nose, larynx, and esophagus; 4. principles of diagnostic and therapeutic management of hearing, voice, and speech disorders;
F.W20.	issues in the field of neurology and neurosurgery, in particular the causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases of the central nervous system in the field of: 1. cerebral edema and its consequences, with particular emphasis on emergency conditions; 2. other forms of intracranial pressure with their consequences; 3. cranial and cerebral injuries; 4. vascular defects of the central nervous system; 5. cancerous tumors of the central nervous system; 6. diseases of the spine and spinal cord;
F.W21.	principles of promoting tissue and cell donation, indications for transplantation of blood-supplying organs, tissues, and hematopoietic cells, complications of treatment, and principles of long-term care after transplantation;
F.W22.	conditions in which life expectancy, functional status, or patient preferences limit

	treatment in accordance with the guidelines specified for a given disease;
F.W23.	principles of suspecting and diagnosing brain death;
G.W1.	methods of assessing the health status of individuals and populations, measures and principles for monitoring the health status of the population, systems for classifying diseases and medical procedures;
G.W2.	disease determinants, methods of identifying and examining disease risk factors, advantages and disadvantages of epidemiological studies, and principles of cause and effect reasoning in medicine;
G.W3.	epidemiology of infectious diseases, including those related to healthcare, and non-infectious diseases, types and methods of prevention at various stages of the natural history of disease, and the role and principles of epidemiological surveillance;
G.W4.	the concept and functions of public health, the concept, tasks, and methods of health promotion, the concept of quality in healthcare and factors influencing it, the structure and organization of the healthcare system at the national and global level, as well as the impact of economic conditions on healthcare capabilities healthcare;
G.W5.	legal regulations concerning patient rights and the Patient Ombudsman, as well as legal regulations relevant to medical practice in the field of labor law, the basics of practicing medicine, and the functioning of the medical self-government;
G.W6.	legal regulations concerning the organization and financing of the healthcare system, the provision of publicly funded healthcare services, and the principles of organization of healthcare entities, the principles of the functioning of information and communication tools and services in healthcare (e-health);
G.W7.	legal obligations of a physician in determining the death of a patient;
G.W8.	legal regulations concerning medical experiments and conducting scientific research involving humans;
G.W9.	legal regulations concerning transplants, artificial reproduction, termination of pregnancy, cosmetic procedures, palliative care, persistent therapy, mental illnesses, infectious diseases;
G.W10.	legal regulations concerning the obligations of a doctor in cases of suspected domestic violence;
G.W11.	basic regulations in the field of pharmaceutical law, including rules for trading in medicinal and medical products, issuing prescriptions, including e-prescriptions, drug reimbursement, cooperation between doctors and pharmacists, reporting adverse drug reactions;
G.W12.	legal regulations concerning medical confidentiality, criminal liability, civil and professional liability of doctors, rules for maintaining, storing, and sharing medical records, including electronic records, and personal data protection;
G.W13.	the concept of violent death and sudden death, and the differences between injury and harm;
G.W14.	legal basis and rules of conduct for doctors during post-mortem examinations the place of discovery and during a forensic medical examination of the body;
G.W15.	principles of forensic medical diagnosis and opinion in cases concerning infanticide and the reconstruction of the circumstances of a traffic accident;
G.W16.	rules for preparing expert opinions;
G.W17.	rules for issuing opinions on forensic medicine concerning the ability to participate in court proceedings, biological effects, and damage to health
G.W18.	the concept and typology of adverse events, including medical errors and medical events, their most common causes, effects, prevention rules and issuing opinions in such cases;
G.W19.	principles of collecting material for toxicological and hemogenetic tests;
G.W20.	legal regulations concerning the transfer of information about the patient's health during their lifetime and after their death, taking into account the scope of information, the group of persons entitled to obtain information, and the rules for transferring it to other persons, as well as restrictions on the scope of information disclosed;
G.W21.	epidemiology of cancer, in particular its nutritional, environmental, and other lifestyle-

	related determinants affecting the risk of cancer;
G.W22.	the importance of screening in oncology, including the risks associated with diagnostic tests in healthy individuals, and the health benefits in relation to the most common cancers in the Republic of Poland.
Skills: graduates are able to	
A.U1.	use an optical microscope, including immersion;
A.U2.	recognize structures corresponding to organs, tissues, cells, and cellular structures in microscopic images, describe and interpret their structure and the relationships between structure and function;
A.U3.	explain the anatomical basis of physical examination;
A.U4.	draw conclusions about the relationships between anatomical structures on the basis of ante-mortem diagnostic tests, in particular in the field of radiology.
B.U1.	use knowledge of the laws of physics to explain the impact of external factors, such as temperature, acceleration, pressure, electromagnetic fields and ionizing radiation, on the human body;
B.U2.	assess the impact of ionizing radiation doses on healthy and diseased tissues of the body and comply with the principles of radiological protection;
B.U3.	calculate molar and percentage concentrations of compounds and concentrations of substances in isosmotic, single-component, and multi-component solutions;
B.U4.	calculate the solubility of inorganic compounds, determine the chemical basis for the solubility or insolubility of organic compounds and its practical significance for dietetics and therapy;
B.U5.	determine the pH of a solution and the effect of pH changes on inorganic and organic compounds;
B.U6.	predict the direction of biochemical processes depending on the energy state of the cells;
B.U7.	perform simple functional tests to assess the functioning of the human body as a stable regulatory system (stress and exercise tests) and interpret numerical data on basic physiological variables;
B.U8.	use medical databases and correctly interpret the information they contain that is necessary for solving problems in the field of basic and clinical sciences;
B.U9.	select the appropriate statistical test, perform basic statistical analyses, and use appropriate methods of presenting results;
B.U10.	classify scientific research methodology, including distinguishing between research experimental and observational studies, along with their subtypes, rank them according to the degree of reliability of the results provided and correctly assess the strength of scientific evidence;
B.U11.	plan and carry out scientific research, interpret its results, and formulate conclusions;
B.U12.	use basic laboratory and molecular techniques
C.U1.	draw up and analyze pedigrees and identify clinical and pedigree characteristics pedigree characteristics suggesting a genetic basis for diseases;
C.U2.	make decisions about the need for cytogenetic and molecular testing molecular tests;
C.U3.	interpret basic genetic test results, including karyotypes;
C.U4.	determine genetic risk based on family history and genetic test results in the case of chromosomal aberrations, genomic rearrangements, single-gene and multifactorial diseases;
C.U5.	recognize pathogens under a microscope;
C.U6.	interpret microbiological test results;
C.U7.	correlate images of tissue and organ damage with clinical symptoms of the disease, medical history, and laboratory test results in order to establish a diagnosis in the most common diseases in adults and children;
C.U8.	perform simple pharmacokinetic calculations;
C.U9.	select drugs in appropriate doses to correct pathological phenomena in the human body and in individual organs;
C.U10.	design rational chemotherapy regimens for infections – empirical and targeted;
C.U11.	prepare prescription records for selected medicinal substances and issue prescriptions,

	including e-prescriptions, in accordance with the law;
C.U12.	search for reliable information on medicinal products, with with particular emphasis on the summary of product characteristics (SmPC) and databases;
C.U13.	assess the toxicological risk in specific age groups and in cases of liver and kidney failure, and prevent drug poisoning.
D.U1.	adhere to ethical standards in professional activities, including plan and conduct the therapeutic process in accordance with ethical values and the idea of humanism in medicine;
D.U2.	recognize the ethical dimension of medical decisions and distinguish between factual and normative aspects;
D.U3.	respect patient rights;
D.U4.	demonstrate responsibility for improving one's qualifications and transferring knowledge to others;
D.U5.	critically analyze medical literature, including in English, and draw conclusions;
D.U6.	communicate with patients in one of the foreign languages at level B2+ of the Common European Framework of Reference for Languages;
D.U7.	develop and improve self-awareness, the ability to self-reflect and self-care, and reflect with others on one's own way of communication and behavior;
D.U8.	recognize one's own emotions and manage them in relationships with others in the ability to perform effectively despite one's own emotional reactions;
D.U9.	describe and critically evaluate one's own behavior and manner of communicating, taking into account the possibility of alternative behavior;
D.U10.	use open-ended and closed questions, paraphrasing, clarification, internal and final summaries, signaling, active listening (e.g., picking up and recognizing signals sent by the interlocutor, verbal and nonverbal techniques) and facilitation (encouraging the interlocutor to speak);
D.U11.	adapt verbal communication to the patient's needs, expressing in an understandable way and avoiding medical jargon;
D.U12.	recognize and analyze difficult situations and challenges related to communication, including crying, strong emotions, anxiety, interruptions statements, awkward and sensitive issues, silence, withdrawal, aggressive and demanding behavior, and deal with them in a constructive manner;
D.U13.	establish contact with the patient and the person accompanying the patient in order to build a proper relationship (e.g., the 4 Habits Model: Invest in the beginning, Demonstrate empathy, Elicit the patient's, Invest in the end);
D.U14.	look at the situation from the patient's perspective, building the appropriate context for the conversation and using the elicitation method, and then take it into account in the construction of verbal messages.
E.U1.	take a medical history from an adult, including an elderly person, using skills related to the content, process, and perception of communication, taking into account the biomedical perspective and the patient's perspective;
E.U2.	collect information from a child and their caregivers, using skills related to the content, process, and perception of communication, taking into account the biomedical perspective and the patient's perspective;
E.U3.	take a medical history in a life-threatening situation using the SAMPLE scheme (S – *Symptoms*, A – Allergies, M – *Medic*ations, P – *Past medical history*, L – *Last meal*, E – *Events prior to injury/illness* (events prior to the accident/illness);
E.U4.	conduct a targeted physical examination of an adult in the area of breasts and prostate gland;
E.U5.	conduct a complete and targeted physical examination of an adult tailored to a specific clinical situation, including examination: 1. general internal medicine; 2. neurological; 3. gynecological;

	4. musculoskeletal system; 5. ophthalmological; 6. otolaryngology; 7. geriatric;
E.U6.	conduct a complete and targeted physical examination of a child from the neonatal to adolescent period, adapted to the specific clinical situation, including: 1. general pediatric; 2. neurological; 3. musculoskeletal system; 4. ophthalmological; 5. otolaryngological;
E.U7.	conduct a psychiatric examination of the patient and assess their mental state mental state;
E.U8.	conduct check-ups, including compiling anthropometric measurements anthropometric measurements and blood pressure with data on centile charts and assess the stage of puberty;
E.U9.	recognize the most common symptoms of disease in adults, apply diagnostic tests and interpret their results, perform differential diagnosis, implement therapy, monitor the effects of treatment, and assess the indications for specialist consultation, in particular in the case of symptoms such as: 1. fever; 2. weakness; 3. loss of appetite; 4. weight loss; 5. shock; 6. cardiac arrest; 7. impaired consciousness, including fainting; 8. swelling; 9. rash; 10. coughing and expectoration; 11. hemoptysis; 12. shortness of breath; 13. discharge from the nose and ear; 14. chest pain; 15. palpitations; 16. cyanosis; 17. nausea and vomiting; 18. swallowing disorders; 19. abdominal pain; 20. blood in stool; 21. constipation and diarrhea; 22. jaundice; 23. bloating and abdominal distension; 24. anemia; 25. lymphadenopathy; 26. urinary disorders; 27. hematuria and proteinuria; 28. menstrual disorders; 29. depression and anxiety; 30. memory and cognitive function disorders; 31. headache; 32. dizziness; 33. paralysis; 34. convulsions;

	35. back pain; 36. joint pain; 37. injury or burns; 38. dehydration and hyperhydration;
E.U10.	recognize the most common symptoms of disease in children, perform diagnostic tests and interpret their results, perform differential diagnosis, implement therapy, monitor treatment effects, and assess indications for specialist consultation, in particular in the case of symptoms such as: 1. fever; 2. cough and expectoration; 3. shortness of breath; 4. nasal and ear discharge; 5. urination disorders; 6. rash; 7. anemia; 8. eating disorders; 9. growth disorders; 10. convulsions and disturbances of consciousness; 11. palpitations; 12. fainting; 13. bone and joint pain; 14. edema; 15. lymphadenopathy; 16. abdominal pain; 17. constipation and diarrhea; 18. blood in stool; 19. dehydration; 20. jaundice; 21. cyanosis; 22. headache; 23. red eye syndrome;
E.U11.	recognize the symptoms of risky and harmful alcohol use and problematic use of other psychoactive substances, symptoms, psychoactive substance addiction and behavioral addictions, and propose appropriate therapeutic and medical treatment;
E.U12.	recognize conditions requiring hospital treatment;
E.U13.	qualify patients for protective vaccinations;
E.U14.	perform medical procedures and treatments, including: 1) measuring and assessing basic vital signs (temperature, heart rate, blood pressure) and monitoring them using a cardiac monitor and pulse oximeter; 2) various forms of inhalation therapy, and select an inhaler appropriate for the patient's condition clinical patient; 3) measurement of peak expiratory flow; 4) oxygen therapy using non-invasive methods; 5) instrumental and non-instrumental airway clearance; 6) intravenous, intramuscular, and subcutaneous administration of medication; 7) collection and preservation of blood for laboratory tests, including microbiological tests; 8) collection of arterial blood and arterialized capillary blood; 9) collection of swabs for microbiological and cytological testing; 10) bladder catheterization in women and men; 11) insertion of a stomach tube; 12) rectal enema; 13) standard resting electrocardiogram, and interpreting its results; 14) defibrillation, electrical cardioversion, and external electrostimulation; 15) strip tests, including glucose measurement using a glucometer;

	16) pleural procedures: puncture and decompression of pneumothorax; 17) anterior nasal tamponade; 18) ultrasound examination in life-threatening conditions according to the FAST (Focused Assessment with Sonography in Trauma) protocol or its equivalent, and interpret its results;
E.U15.	use personal protective equipment appropriate to the clinical situation;
E.U16.	declare the patient dead;
E.U17.	participate in the process of dignified dying of the patient, using the potential of palliative care;
E.U18.	maintain the patient's medical records, including in electronic form, in accordance with the law;
E.U19.	plan diagnostic, therapeutic, and preventive procedures in the field of cancer treatment based on test results and the medical records provided medical documentation;
E.U20.	provide health services using available or communication systems used in healthcare;
E.U21.	provide health education to patients, including nutrition education tailored to individual needs;
E.U22.	use rational antibiotic therapy depending on the patient's clinical condition of the patient;
E.U23.	conduct a conversation with the patient, taking into account the conversation pattern (starting the conversation, gathering information, explaining and planning, concluding the conversation), taking into account the structure of such a conversation and shaping the relationship with the patient using a selected model (e.g. Calgary-Cambridge guidelines, Segue, Kalamacredito Consensus, Maastricht Maas Global), including through electronic means of communication;
E.U24.	take a history from the patient regarding suicidal thoughts, where justified;
E.U25.	provide the patient with information, adjusting its amount and content to the patient's needs and capabilities, and supplement verbal information with models and written information, including charts and instructions, and use them appropriately;
E.U26.	make diagnostic and therapeutic decisions together with the patient (assess the patient's level of involvement, needs, and capabilities in this regard, encourage the patient to take an active part in the decision-making process, discuss the advantages, disadvantages, expected results, and consequences of the decision) and obtain the patient's informed consent;
E.U27.	communicate with patients from groups at risk of economic or social exclusion, respecting their dignity;
E.U28.	identify social determinants of health, indicators of unhealthy and self-destructive behaviors, and discuss them with the patient and make a note in the medical records;
E.U29.	identify possible indicators of violence, including domestic violence, collect information to verify whether there is risk that the patient is experiencing violence, make a note in the medical records, and initiate the "Blue Card" procedure;
E.U30.	apply the principles of giving feedback (constructive, non-judgmental, descriptive) as part of teamwork;
E.U31.	accept, explain, and analyze one's own role and scope of responsibility in the team and recognize your role as a physician in the team;
E.U32.	obtain information from team members while respecting their diverse opinions and specialist competences, and take this information in the patient's diagnostic and therapeutic plan;
E.U33.	discuss the patient's situation within the team, excluding subjective assessments, while respecting the patient's dignity;
E.U34.	apply the following protocols (e.g., when transferring patient care, ordering or providing a patient consultation): 1. ATMIST (A (Age), T (Time of injury), M (Mechanism of injury), I (Injury suspected), S (Symptoms/Signs), T (Treatment/Time)); 2. RSVP/ISBAR (R (Reason), S (Story), V (Vital signs), P (Plan)/I (Introduction), S (Situation), B (Background), A (Assessment), R (Recommendation)).

F.U1.	wash hands surgically, put on sterile gloves, dress for surgery or a procedure requiring sterility, prepare the surgical field in accordance with the principles of asepsis, and participate in the surgical procedure;
F.U2.	apply and change a sterile dressing;
F.U3.	assess and treat a simple wound, including local anesthesia (superficial, infiltrative), apply and remove surgical sutures, apply and change a sterile surgical dressing;
F.U4.	recognize the most common life-threatening conditions, including using various imaging techniques;
F.U5.	recognize the most common types of fractures, especially long bones, based on radiological examination types of fractures, especially long bones;
F.U6.	providently immobilize a limb, including selecting the type of immobilization in typical clinical situations and check the correct blood supply to the limb after applying an immobilizing dressing;
F.U7.	immobilize the cervical and thoracolumbar spine after injury;
F.U8.	treat external bleeding;
F.U9.	perform basic life support (BLS) in newborns and children in accordance with the guidelines of the European Resuscitation Council (ERC);
F.U10.	perform advanced resuscitation procedures in newborns (Newborn Life Support, NLS) and children (Pediatric Advanced Life Support, PALS) in accordance with ERC guidelines;
F.U11.	perform basic life support (BLS) in adults, including those with use of an automated external defibrillator, in accordance with ERC guidelines ERC;
F.U12.	perform advanced life support (ALS). ALS in adults in accordance with ERC guidelines;
F.U13.	apply correct medical procedures in the case of pregnancy and postpartum in accordance with perinatal care standards;
F.U14.	recognize the most common symptoms indicating abnormal pregnancy and postpartum, apply and interpret diagnostic tests, perform differential diagnosis, implement therapy, monitor the effects of treatment, and assess the indications for specialist consultation, in particular in the case of abdominal pain, uterine contractions, bleeding from the genital tract, abnormal heart rate and fetal mobility, arterial hypertension ;
F.U15.	detect and interpret fetal heart activity;
F.U16.	recognize the onset of labor and signs of abnormal labor;
F.U17.	assist in physiological labor;
F.U18.	apply appropriate medical procedures in the event of abnormal bleeding from the genital tract, amenorrhea, pain in the pelvic area (inflammation of the pelvic organs, ectopic pregnancy), inflammation of the vagina and vulva, sexually transmitted diseases;
F.U19.	apply correct medical procedures in the field of birth control births;
F.U20.	recognize ophthalmic conditions requiring urgent specialist care and provide initial pre-hospital care in cases of physical and chemical injuries to the eye;
F.U21.	communicate bad news using a selected protocol, e.g.: 1) SPIKES: S (Setting – appropriate environment), P (Perception – understanding the knowledge of the interlocutor), I (Invitation/Information – invitation to talk / informing), K (Knowledge – conveying bad news), E (Emotions and empathy – emotions and empathy), S (Strategy and summary), 2) EMPATHY: E (Emotions), M (Location), P (Patient's perspective), A (Appropriate language), T (Content of the message), I (Additional information), A (Annotation in the documentation), 3) ABCD E : A (Advance preparation), B (Build therapeutic environment), C (Communicate well), D (Dealing with reactions), E (Encourage and validate emotions) 4) emotions, redirecting them and responding appropriately, aiming to end the meeting – including supporting the family in the process of the patient's dignified death and informing the family about the patient's death;

F.U22.	obtain information from team members while respecting their diverse opinions and specialist competences, and take this information into account in the patient's diagnostic and therapeutic plan, as well as use ATMIST, RSVP/ISBAR protocols.
G.U1.	describe the demographic structure of the population and, on this basis, assess and predict the health problems of the population;
G.U2.	collect information on the determinants and presence of risk factors for infectious and non- infectious diseases and plan preventive measures at various levels of prevention;
G.U3.	interpret positive and negative health indicators;
G.U4.	assess the epidemiological situation of infectious and non-infectious diseases in the Republic of Poland and worldwide;
G.U5.	explain to people using health services their basic rights and the legal basis for the provision of these services;
G.U6.	issue medical certificates and medical opinions, prepare opinions for patients, authorized bodies, and entities, prepare and maintain medical records (in electronic and paper form), and use information and communication tools and services in healthcare (e-health);
G.U7.	recognize during the examination of a patient behaviors and symptoms indicating the possibility of violence, including domestic violence;
G.U8.	act in a manner that prevents adverse events and ensuring quality in healthcare and patient safety, monitor the occurrence of adverse events and respond to them, report their occurrence and analyze their causes;
G.U9.	take blood samples for toxicological testing and secure material for for hemogenetic testing;
G.U10.	organize the work environment in a manner that ensures the safety of the patient and other persons, taking into account the influence of human factors and ergonomic principles;
G.U11.	determine the possibility of applying new methods of treatment in relation to a given patient based on current clinical trial results.
H.U1.	measure and assess basic vital functions (temperature, heart rate, blood pressure) and monitor them using a cardiac monitor and pulse oximeter;
H.U2.	perform instrument-assisted and non-instrument-assisted airway clearance;
H.U3.	measure peak expiratory flow;
H.U4.	collect and secure blood and other biological material for laboratory testing, including microbiological tests;
H.U5.	administer intravenous, intramuscular, and subcutaneous medication;
H.U6.	perform various forms of inhalation therapy and select an inhaler according to the clinical situation;
H.U7.	collect arterial blood and arterialized capillary blood;
H.U8.	perform strip tests, including glucose concentration measurement using a glucometer;
H.U9.	take swabs for microbiological and cytological testing;
H.U10.	perform bladder catheterization in women and men;
H.U11.	insert a stomach tube;
H.U12.	perform a rectal enema;
H.U13.	perform pleural procedures: puncture and decompression of pneumothorax;
H.U14.	perform a standard resting electrocardiogram and interpret its results;
H.U15.	perform defibrillation, electrical cardioversion, external electrical pacing;
H.U16.	perform surgical hand washing, put on sterile gloves, dress for surgery or procedures requiring sterility, prepare the surgical field in accordance with the principles of asepsis, and participate in the surgical procedure;
H.U17.	apply and change a sterile dressing;
H.U18.	assess and treat a simple wound, including local anesthesia (superficial, infiltration), apply and remove surgical sutures, apply and change sterile surgical dressing;
H.U19.	treat external bleeding;
H.U20.	temporarily immobilize the limb, including selecting the type of immobilization in

	typical clinical situations and check the correct blood supply to the limb after applying an immobilizing dressing;
H.U21.	immobilize the cervical and thoracolumbar spine after injury;
H.U22.	perform anterior nasal tamponade;
H.U23.	perform an ultrasound examination in life-threatening conditions according to the FAST protocol or its equivalent and interpret its results;
H.U24.	use personal protective equipment appropriate to the clinical situation;
H.U25.	take a medical history from an adult, including an elderly person, using skills related to the content, process, and perception of communication, taking into account the biomedical perspective and the patient's perspective;
H.U26.	collect information from children and their caregivers, using skills related to the content, process, and perception of communication, taking into account the biomedical perspective and the patient's perspective;
H.U27.	gather information in a situation threatening health and life, using SAMPLE diagram;
H.U28.	conduct a complete and focused physical examination of an adult tailored to the specific clinical situation;
H.U29.	perform a complete and focused physical examination of a child from the neonatal to adolescent period, adapted to a specific clinical situation clinical situation;
H.U30.	convey unfavorable news using the selected protocol's communication skills (protocol (e.g., SPIKES, EMPATIA, ABCDE), including supporting the family in the process of the patient's dignified death and inform the family about the patient's death;
H.U31.	obtain information from team members while respecting their diverse opinions and specialist competences, take this information into account in the patient's diagnostic and therapeutic plan, and apply the ATMIST and RSVP/ISBAR protocols;
H.U32.	conduct a psychiatric examination of the patient and assess their mental state;
H.U33.	declare the patient's death;
H.U34.	conduct check-ups, including compiling anthropometric measurements anthropometric measurements and blood pressure with data on centile charts and assess the stage of puberty;
H.U35.	qualify the patient for protective vaccinations;
H.U36.	perform oxygen therapy using non-invasive methods;
H.U37.	perform basic life support (BLS) in newborns and children in accordance with ERC guidelines;
H.U38.	perform advanced life support in newborns (NLS) and children (PALS) in accordance with ERC guidelines;
H.U39.	perform basic life support (BLS) in adults, including the use of an automated external defibrillator, in accordance with ERC guidelines;
H.U40.	perform advanced life support (ALS) in adults in accordance with ERC guidelines;
H.U41.	recognize the most common life-threatening conditions, including using various imaging techniques;
H.U42.	recognize ophthalmic conditions requiring urgent specialist care and provide initial pre-hospital care in cases of physical and chemical eye injuries chemical injuries to the eye;
H.U43.	detect and interpret fetal heart activity;
H.U44.	perform activities while assisting in physiological childbirth.
EK.01.	take health-promoting and educational measures, putting into practice knowledge and skills in various forms of physical activity.
EK.02.	create the values of physical activity as a form of physical and mental relaxation and promote a positive pro-health attitude that influences functional fitness in adult life.
Social competences: the graduate is ready to	
K.01	establish and maintain deep and respectful contact with patients, as well as show understanding for differences in worldviews and cultural differences;
K.02	be guided by the patient's well-being;
K.03	respecting medical confidentiality and patient rights;
K.04	taking action towards the patient based on ethical principles, with an awareness of the social conditions and limitations resulting from the illness;

K.05	recognizing and identifying one's own limitations, self-assessing deficits and educational needs;
K.06	promoting healthy behaviors;
K.07	using objective sources of information;
K.08	drawing conclusions from one's own measurements or observations;
K.09	implementing the principles of collegiality professional conduct and cooperation in a team, including with representatives of other medical professions, also in a multicultural and multinational environment;
K.10	formulating opinions on various aspects of professional activity;
K.11	accepting responsibility for decisions made in the course of professional activities, including in terms of the safety for oneself and others.
K.12	promoting healthy behaviors;

President of the Senate

of the University of Rzeszów

Prof. Sylwester Czopek, PhD Rector

Appendix No. 10.3. to Resolution No. 342/06/2024 of the Senate of the UR

of June 27, 2024

CHARACTERISTICS AND CONDITIONS FOR IMPLEMENTATION OF THE STUDY

PROGRAM

Effective from the 2025/2026 academic year

<table>
<tr><td colspan="2">Name of the field of study</td><td colspan="2">Medicine</td></tr>
<tr><td colspan="2">Level of studies</td><td colspan="2">Uniform master's studies degree</td></tr>
<tr><td colspan="2">Profile</td><td colspan="2">General academic</td></tr>
<tr><td rowspan="2">1</td><td rowspan="2">Total number of hours</td><td>Full-time</td><td>part-time</td></tr>
<tr><td>5761</td><td>5761</td></tr>
<tr><td>2</td><td>Number of ECTS credits for individual disciplines in the total number of ECTS credits required to complete studies in the field of</td><td colspan="2">Medical sciences – 360 ECTS</td></tr>
<tr><td rowspan="2">3.</td><td rowspan="2">The total number of ECTS credits that a student must obtain in classes conducted with the direct participation of academic teachers or other persons conducting classes</td><td>full-time</td><td>part-time</td></tr>
<tr><td>217</td><td>217</td></tr>
<tr><td>4</td><td>The number of ECTS credits that a student must obtain in classes in the field of humanities or social sciences, not less than 5 ECTS credits – in the case of fields of study assigned to disciplines in fields other than the humanities or social sciences, respectively</td><td colspan="2">7</td></tr>
<tr><td>5.</td><td>Number of ECTS credits that a student must obtain as a part of elective courses (not less than 3% of the total number of ECTS credits)</td><td colspan="2">11</td></tr>
<tr><td>6.</td><td>Number of hours of physical education classes (in the case of first-cycle studies and uniform master's studies conducted in the form of full-time studies)</td><td colspan="2">60</td></tr>
<tr><td>7.</td><td>Total number of ECTS points assigned to classes developing practical skills – applies to the practical profile</td><td colspan="2"></td></tr>
<tr><td>8.</td><td>Total number of ECTS credits assigned to classes related to scientific activity in the discipline or disciplines to which the field of study is assigned, taking into account the preparation of students to conduct scientific activity or participate in such activity – applies to the general academic profile</td><td colspan="2">226</td></tr>
<tr><td>9.</td><td>The scope, rules, and forms of professional internships and the number of ECTS credits assigned to internships</td><td colspan="2">Number of hours: 600
Duration 20 weeks ECTS points 20
Method of implementation and conditions commencement of the internship: internships in hospital wards and medical facilities on the basis of referrals</td></tr>
</table>

10.	Description of methods of verification and assessment of learning outcomes achieved by the student throughout the entire education cycle	**Verification of knowledge:** written exams, written and/or oral partial and final exams, partial assignments, papers. **Verification of social skills and competences:** practical tests, clinical exams, exams standardized OSCE, student observations during classes. Detailed forms of verification of the achievement of the intended learning outcomes are specified in the course syllabi.
11.	Conditions for completion of studies	Passing all exams, assessments, and professional internships, and obtaining the number of ECTS credits required in the program

Conditions for completion of the study program

No.	Subjects or groups of subjects	Field-specific learning outcomes assigned to subjects/groups of subjects	Number of hours		Form of assessment	Number of ECTS points
			full-time	part- time		
General subjects						
1	**Physical education**	EK.01; EK.02;	60	60	CREDIT	-
			Σ 60	Σ 60		-
A. Morphological sciences						
2	**Anatomy**	A.W1.; A.W3.; A.U3., A.U4.; K.05; K.08;	170	170	E	13
3	**Histology and embryology**	A.W1.; A.W2.; A.W3.; A.W4.; A.U1.; A.U2.; K.05; K.07; K.08;	120	120	E	10
			∑ 290	∑ 290		∑ 23
B. Scientific foundations of medicine						
4	**Biophysics**	B.W7.; B.W8.; B.U1.; B.U2.; K.07; K.08.;	45	45	CREDIT	4
5	**Molecular biology**	B.W13.; B.W14.; B.W17.; B.U6.; B.U8.; B.U12.; K.05; K.07; K.08.;	40	40	CREDIT	3
6	**General andmedical chemistry** **Medical chemistry**	B.W1.; B.W2.; B.W3.; B.W9.; B.W10.; C.W38.; B.U3.; B.U4.; B.U5.; K.05; K.07; K.08.;	60	60	CREDIT	4
7	**Biochemistry**	B.W9.; B.W10.; B.W11.;. B.W12.; B.W13. B.W15.; B.U6.; B.U11.; B.U12.; K.05; K.07; K.08.; K.11.;	100	100	E	8
8	**Physiology**	B.W1.;B.W2.; B.W16.; B.W17., B.W18.; B.W19.; B.W20.; B.W21.; B.W22.; C.W4.; C.W38; C.W39; C.W40; B.U7.; B.U12.; K.05; K.08; K.11;	150	150	E	11
9	**Cytophysiology**	B.W16.; B.W17. B.W18.; B.U12.; K.05; K.07; K.08;	14	14	CREDIT	1

10	**Information technology and biostatistics**	B.W23.; B.W24.; B.W25.; B.U8.; B.U9.; B.U12.;	30	30	CREDIT	3
11	**Research methodology**	B.W26.; D.W19.; G.W8.; B.U10.; B.U11.; D.U17.; G.U11.; K.07;	15	15	CREDIT	1
12	**Evidence-based medicine**	B.W26.; D.W19.; B.U10.; B.U11.; D.U5.; K.05; K.07;	12	12	CREDIT	1
			∑ 466	∑ 466		∑ 36
C. Preclinical sciences						
13	**General genetics**	C.W1.; C.W2.; C.W3.; C.W4.; C.W5.; C.W6.; C.W7.; C.U1.;	30	30	CREDIT	2
14	**Clinical genetics**	C.W5, C.W6.; C.W7.; C.W8.; C.U2; C.U3.; C.U4.;	30	30	E	2
15	**Microbiology with parasitology**	C.W9.; C.W10.; C.W11.; C.W12.; C.W14.; C.W15.; C.W16.; C.W17.; C.U5.; C.U6.; K.05; K.08; K.11;	95	95	E	7
16	**Basic immunology**	C.W18.; C.W19.; C.W20.; C.W21.; C.W42.; C.W43.; C.U7.;	45	45	E	4
17	**Pathology**	C.W25.; C.W26.; C.W27.; C.U7.; K.05; K.07; K.08;	120	120	E	10
18	**Pharmacology**	C.W28.; C.W29.; C.W30.; C.W31.; C.W32.; C.W33.; C.U8.; C.U9.; C.U10.; C.U11.; C.U12.; C.U13.; K.05; K.07; K.08; K.11; K.12;	120	120	E	10
19	**Toxicology**	C.W13.; C.W34.; C.W35.; C.W36.; C.W37.; C.U12.; C.U13.; K.05; K.07; K.08; K.11	30	30	CREDIT	2
20	**Pathophysiology**	C.W23; C.W24; C.W25; C.W26; C.W27.; C.W38.; C.W39.; C.W40.; C.W41.; K.05; K.08; K.11;	120	120	E	10
21	**Clinical immunology**	C.W16.; C.W21.; C.W22.; C.W33.; C.W42.; C.W43.; C.U7., K.01; K.02; K.03; K.04; K.05; K.06; K.07;	45	45	E	3
			∑ 635	∑ 635		∑ 50
D. Behavioral and social sciences with elements of professionalism						
22	**Sociology of medicine**	D.W1.; D.W2.; D.W3.; D.W4.; D.W5.; D.W8.; D.W9.; D.W10.; D.W13.; K.09;	25	25	CREDIT	2
23	**Medical psychology with elements of interpersonal communication**	D.W.3.; D.W4.; D.W5.; D.W6.; D.W7.; D.W8.; D.W9.; D.W10.; D.W11.; D.W12.; D.W13.; D.W14.; D.U7.; D.U8.; D.U9.;	30	30	CREDIT	3

		D.U10.; D.U 11.; D.U12.; K.07.; K.09.;				
24	**Medical ethics**	D.W15., D.W16., D.W17.; D.U1.; D.U2.; D.U3.; K.04;	15	15	CREDIT	1
25	**History of medicine**	D.W18.,	20	20	CREDIT	1
26	**Elements of professionalism**	D.W6.; D.W7.; D.W16.; D.W17.; D.W19.; D.W20.; D.U1.; D.U2.; D.U3.; D.U4.; D.U5.; D.U7.; D.U8.; D.U9.; D.U11.; D.U12.; D.U13.; D.U14.; K.07; K.09;	20	20	CREDIT	2
27	**English**	D.U5.; D.U6.;	120	120	E	8
28	**Clinical communication**	D.W6.; D.W7.; D.U9.; D.U10.; D.U11.; D.U12.; D.U13.; D.U14.; K.09;	15	15	CREDIT	1
			∑ 245	∑ 245		∑ 18
E. Non-surgical clinical sciences						
29	**Pediatrics**	E.W1.; E.W2.; E.W3.; E.W4.; E.W5.; E.W6.; E.W36.; E.W39.; E.W40.; E.U2.; E.U6.; E.U8.; E.U10.; E.U12.; E.U13.; E.U18.; E.U20.; E.U21.; E.U22.; E.U23.; E.U25.; E.U29.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11; K.12;	238	238	CREDIT	15
30	**Internal diseases**	E.W7.; E.W8.; E.W9.; E.W10.; E.W27.; E.W36.; E.W39.; E.W40.; E.W41.; E.W42 E.U1.; E.U3.; E.U4.; E.U5.; E.U9.; E.U11.; E.U14., E.U15.; E.U16.; E.U17.; E.U18.; E.U20.; E.U21.; E.U 22.; E.U23.; E.U25.; E.U26.; E.U27.; E.U28.; E.U29.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04;K.05; K.06; K.07; K.08; K.09; K.10; K.11; K.12;	264	264	CREDIT	17
31	**Neurology**	E.W15.; E.W16.; E.U1.; E.U3.; E.U5.; E.U23.; E.U25.; E.U26.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11; K.12;	85	85	E	5

32	**Geriatrics and palliative medicine**	E.W10.; E.W11.; E.W12.; E.W13.; E.W25.; E.W26.; E.W27.; E.U1.; E.U5.; E,U14.; E.U16.; E.U17.; ; E.U21.; E.U23.; E.U26.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06;	25	25	CREDIT	1
33	**Psychiatry**	E.W5.; E.W17.; E.W18.; E.W19.; E.W20.; E.W21.; E.W22.; E.W23.; E.U1.; E.U2.; E.U7., E.U11.; E.U23.; E.U24.; E.U25.; E.U26.; E.U28.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04;	65	65	CREDIT	4
34	**Dermatology and venereology**	E.W35.; E.U1.; E.U2.; E.U18.; E.U23.; E.U26.; E.U30.; E.U31.; E.U32.' E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11;	60	60	E	4
35	**Oncology**	E.W14.; E.W24.; E.W25.; E.W26.; E.W27.; E.W41.; E.W42.; E.U1.; E.U2.; E.U19.; E.U20.; E.U21.; E.U23.; E.U26.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11;	75	75	CREDIT	4
36	**Family medicine**	E.W37.; E.W38.; E.U1.; E.U2.; E.U4.; E.U8.; E.U9.; E.U12.; E.U18.; E.U20.; E.U21.; E.U22.; E.U23.; E.U27.; E.U28.; E.U29.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11;	70	70	CREDIT	4
37	**Infectious diseases**	E.W31.; E.W32.; E.W33.; E.W34.; E.U1.; E.U5.; E.U15.; E.U18.; E.U20.; E.U23.; E.U30.; E.U31.; E.U32.; E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05;	60	60	E	4
38	**Rehabilitation**	E.W28.; E.W29.; E.W30.; E.U23.;E.U30.; E.U31.; E.U32.'E.U33.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06;	30	30	CREDIT	2

39	**Laboratory diagnostics**	E.W6.; E.W7.; E.W34.; E.W39.; E.W40.; C.U6.;	44	44	E	3
40	**Clinical pharmacology**	E.W3.;E.W7.; E.W8.; E.W27.; E.W33.; E.W41.; E.U30.; E.U32.; K.01; K.02; K.03; K.04; K.05; K.06; K.07;	30	30	E	2
41	**Introduction to internal medicine**	E.W7.; E.W36.; E.U1.; E.U3.; E.U5.; E.U9.; E.U14.; E.U18.; E.U21.; E.U23.; E.U34.; K.01; K.02; K.03; K.04; K.05; K.06;	80	80	CREDIT	5
42	**Introduction to oncology**	E.W14.; E.W24.; E.U19.; E.U21.; E.U23.; E.U32.; E.U33.; E.U34.;	30	30	CREDIT	2
43	**Introduction to pediatrics**	E.W1.; E.W2.; E.W3.; E.W5.; E.W36.; E.U2.; E.U6.; E.U8.; E.U10.; E.U12.; E.U13.; E.U18.; E.U23.; K.01; K.02; K.03; K.04; K.05; K.06;	85	85	CREDIT	5
			∑ 1241	∑ 1241		∑ 77
F. Clinical surgical sciences						
44	**Anesthesiology and intensive care**	F.W4.; F.W6.; F.W7.; F.W8.; F.W9.; F.W10.; F.W13.; F.W14.; F.W22.; F.W23.; F.U1.; F.U3.; F.U4.; F.U9.; F.U10.; F.U11.; F.U12.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11;	70	70	E	4
45	**Surgery**	F.W1.; F.W2.; F.W3.; F.W4.; F.W5.; F.W6.; F.W7.; F.W10.; F.W13.; F.W17.; F.W22.; F.U1.; F.U2.; F.U3.; F.U4.; F.U5.; F.U6.; F.U7.; F.U8.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11; K.12;	220	220	CREDIT	14
46	**Orthopedics and traumatology of the musculoskeletal system**	F.W1.; F.W2.; F.W3.; F.W4.; F.W6.; F.W7.; F.W13.; F.U1.; F.U2.; F.U3.; F.U4.; F.U5.; F.U6.; F.U7.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05;	80	80	E	5

47	**Emergency medicine**	F.W9.; F.W10.; F.W11.; F.W12.; F.U2.; F.U3.; F.U4.; F.U6.; F.U7.; F.U8.; F.U9.; F.U10.; F.U11.; F.U12.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05;	60	60	CREDIT	4
48	**Gynecology and obstetrics**	F.W10.; F.W11.; F.W15.; F.W16.; F.U13.; F.U14.; F.U15.; F.U16.; F.U17.; F.U18., F.U19.; F.U21.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11; K.12;	180	180	CREDIT	12
49	**Urology**	F.W3.; F.W4.; F.W10.; F.W16.; F.U1.; F.U2.; F.U3.; F.U21.; F.U22.; K.01; K.02; K.03; K.04;	24	24	CREDIT	1
50	**Otolaryngology**	F.W1.; F.W10.; F.W19.; F.U2.; F.U3.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05;	60	60	E	4
51	**Ophthalmology**	F.W10.; F.W18.; F.U2.; F.U3.; F.U20.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11;	70	70	E	4
52	**Neurosurgery**	F.W1.; F.W4.; F.W10.; F.W20.; F.W21.; F.W22.; F.U1.; F.U2.; F.U3.; F.U4.; F.U7.; F.U21.; F.U22.; K.01; K.02; K.03; K.04; K.05; K.06; K.07; K.08; K.09; K.10; K.11;	45	45	CREDIT	2
53	**Transplantology**	F.W21.; G.W9.; K.02.; K.04.;	35	35	CREDIT	2
54	**Diagnostic imaging**	F.W17.; F.U4.; F.U5.; B.U2.;	45	45	E	3
55	**First aid with elements of nursing**	E.U14.; F.W9.; F.W10.; F.U2.; F.U3.; F.U7.; F.U8.; F.U9.; F.U10.; F.U11.; F.U12.; K.05; K.07; K.08; K.11;	30	30	CREDIT	2
56	**Propedeutics of masticatory system diseases with elements of dental prophylaxis**	E.W7.; E.W14.; E.W26.; E.U3.; E.U16.; E.U20.; E.U32.; K.01; K.02; K.03; K.04; K.05;	30	30	CREDIT	2
			∑ 949	∑ 949		∑ 59
G. Legal and organizational aspects of medicine						
57	**Hygiene and epidemiology**	G.W1.; G.W2.; G.W3.; G.W21.; G.W22.; G.U2.; G.U4.;	35	35	E	3
58	**Public health**	D.W2.; G.W4.; G.W5.; G.W6.; G.U1.;	20	20	CREDIT	1

		G.U3.; G.U5.; G.U8.; G.U11.;				
59	**Law and forensic medicine**	G.W5.; G.W7.; G.W8.; G.W9.; G.W10.; G.W11.; G.W12.; G.W13.; G.W14.; G.W15.; G.W16.; G.W17.; G.W18.; G.W19., G.W20.; G.U6.; G.U7.; G.U9.; G.U10.,	45	45	E	2
			∑ 100	∑ 100		∑ 6
H. Practical clinical teaching cHarried out as part of the EiF group of courses						
60	**Internal Diseases**	H.U1.; H.U3.; H.U4.; H.U5.; H.U6.; H.U7.; H.U8.; H.U9.; H.U11.; H.U12.; H.U14.; H.U24.; H.U25.; H.U28.;H.U30.; H.U31.; H.U33.; H.U36.; H.U39.;H.U41	240	240	E	16
61	**Pediatrics**	H.U1.; H.U3.; H.U4.; H.U5.; H.U6.; H.U26.; H.U29.; H.U31.; H.U34.; H.U35.; H.U37.; H.U38	120	120	E	8
62	**Surgery**	H.U1.; H.U5.; H.U7.; H.U10.; H.U11.; H.U16.; H.U17.; H.U18.; H.U19.; H.U23.; H.U24.; H.U30.; H.U31.; H.U33	120	120	E	8
63	**Gynecology and obstetrics**	H.U1.; H.U4.; H.U5.; H.U9.; H.U16.; H.U17.; H.U41.; H.U43.; H.U44.;	60	60	E	4
64	**Psychiatry**	H.U5.; H.U25.; H.U26.; H.U31.; H.U32.;	60	60	E	4
65	**Emergency medicine**	H.U1.; H.U2.; H.U5.; H.U10.; H.U13.; H.U14.; H.U15.; H.U18.; H.U19.; H.U20.; H.U21.; H.U22.; H.U23.; H.U25.; H.U26.; H.U27.; H.U28.; H.U30.; H.U31.; H.U33.; H.U36.; H.U37.; H.U38.; H.U39.; H.U40.; H.U41	60	60	E	4
66	**Family medicine**	H.U1.; H.U5.; H.U8.; H.U14.; H.U25.; H.U28.; H.U35.; H.U42.;	60	60	E	4
67	**A specialty chosen by the student**	Selected learning outcomes depending on the type of specialty	180	180	CREDIT	12
			∑ 900	∑ 900		∑ 60
Group of elective subjects - optional classes						
	Electives*	Selected learning outcomes depending on the subject of the elective course	275	275	CREDIT	11
			Σ 275	Σ275		Σ 11
Total (the sum includes subjects for one specialization/one educational path)			**Σ 5161**	**Σ 5161**		**Σ 340**

Professional practice				
Patient care - 4 weeks	120	120	CREDIT	4
Family medicine - 3 weeks	90	90	CREDIT	3
Emergency help - 1 week	30	30	CREDIT	1
Internal diseases - 4 weeks	120	120	CREDIT	4
Pediatrics - 2 weeks	60	60	CREDIT	2
Surgery - 2 weeks	60	60	CREDIT	2
Gynecology and obstetrics - 2 weeks	60	60	CREDIT	2
Intensive care - 2 weeks	60	60	CREDIT	2
	∑ 600	∑ 600		∑ 20
Total:	**Σ 5761**	**Σ 5761**		**Σ 360**

* Electives - a list of elective courses is presented to students for selection each year by May 31 before the academic year in which the elective is to be taken.

Students are required to complete mandatory training in occupational health and safety and library training in the form of e-learning.

Description of the course of study, including the order of subjects, rules for selecting elective subjects, and rules for completing educational paths. Medical studies last 12 semesters. During the first 4 semesters, subjects from the group of basic and preclinical sciences are taught basic and preclinical subjects are taught, and in the next 6 semesters, mainly clinical, surgical, and non-surgical subjects are taught. In the final year of study, education takes the form of practical vocational training. The list of elective subjects is provided to students on a regular basis before the start of the next academic year. Full-time, part-time, and English Division students follow the same study schedule.

President of the Senate

of the University of Rzeszów

Prof. Sylwester Czopek, PhD Rector