Appendix No. 3.1. to Resolution No. 210/01/2023 of the Senate of the UR dated January 26, 2023.

GENERAL INFORMATION ABOUT THE FIELD OF STUDY

Valid from the academic year 2022/2023

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 of studies	Full-time / Part-time
5.	Number of semesters	12
6.	Number of ECTS points required to complete studies at a given level	***364***
7.	Professional title	Lekarz (Medical doctor)
8.	Assignment of the field of study to a scientific or artistic discipline (specifying the percentage share if the field of study is assigned to more than one discipline and identifying the leading discipline, under which more than half of the learning outcomes will be obtained)	Field: medical sciences and health sciences Leading discipline: medical sciences - 100% Other disciplines: - Total: 100%
9.	Differences in comparison to other programs with similarly defined objectives and learning 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, employment and further study opportunities.	Graduates of the Medical program receive a diploma and the professional title of lekarz (medical doctor). After completing their studies, they take the Final Medical Exam, and upon passing, they gain the right to practice as a physician, which allows them to work in healthcare institutions, as well as in scientific-research centers, academic institutions, and clinics at medical universities. Completing the studies enables further qualification, knowledge, and skill development through medical specializations, as well as supplementary and continuing education courses in various medical fields. Graduates may also pursue further studies in doctoral (third-degree) programs.

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. 3.2. to Resolution No. 210/01/2023 of the Senate UR
dated January 26, 2023.

DESCRIPTION OF EXPECTED LEARNING OUTCOMES

Valid from the 2022/2023 academic year

Name of the field of study	Medicine
Level of studies	Uniform Master's degree studies
Profile of studies	General Academic
The description of the intended learning outcomes for the field of study, level, and profile of education is consistent with Annex No. 1 to the Regulation of the Minister of Science and Higher Education of 26 July 2019 on the standards of education preparing for the profession of physician, dentist, pharmacist, nurse, midwife, laboratory diagnostician, physiotherapist, and paramedic (i.e. Journal of Laws of 2021, item 755, as amended).	
Symbol of the field-specific learning outcomes (based on the standard)	**Major-related learning outcomes**
with regard to knowledge he/she knows and understands	
A.W1.	anatomical, histological and embryological terminology in Polish and English;
A.W2.	the structure of the human body in a topographic approach (upper and lower limbs, chest, abdomen, pelvis, back, neck, head) and functional approach (osteoarticular system, muscular system, circulatory system, respiratory system, digestive system, urinary system, reproductive systems, nervous system and sense organs, common integument);
A.W3.	topographic relations between individual organs;
A.W4.	basic cellular structures and their functional specializations;
A.W5.	microarchitecture of tissues, extracellular matrix and organs;
A.W6.	stages of human embryo development, structure and function of fetal membranes and placenta, stages of development of individual organs and the influence of harmful factors on embryo and fetal development (teratogenic).
B.W1.	water and electrolyte balance in biological systems;
B.W2.	acid-base balance and the mechanism of buffer action and their importance in systemic homeostasis;
B.W3.	concepts: solubility, osmotic pressure, isotonia, colloidal solutions and Gibbs- Donnan equilibrium;
B.W4.	basic reactions of inorganic and organic compounds in aqueous solutions;
B.W5.	physical laws describing fluid flow and factors influencing vascular resistance to blood flow;
B.W6.	natural and artificial sources of ionizing radiation and its interaction with matter;
B.W7.	physicochemical and molecular basis of sensory organs;
B.W8.	physical basis of non-invasive imaging methods;
B.W9.	physical basis of selected therapeutic techniques, including ultrasound and radiation;

B.W10.	structure of simple organic compounds that are part of macromolecules present in cells, the extracellular matrix and body fluids;
B.W11.	structure of lipids and polysaccharides and their functions in cellular and extracellular structures;
B.W12.	structures of primary, secondary, tertiary and quaternary proteins and post- translational and functional modifications of proteins and their significance;
B.W13.	functions of nucleotides in the cell, primary and secondary structures of DNA and RNA, and chromatin structure;
B.W14.	functions of the human genome, transcriptome, and proteome and basic 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.W15.	basic catabolic and anabolic pathways, their regulation, and the influence of genetic and environmental factors;
B.W16.	metabolic profiles of basic organs and systems;
B.W17.	cell-cell and cell-extracellular matrix communication pathways, and signaling pathways in the cell, as well as examples of disruptions in these processes leading to the development of cancer and other diseases;
B.W18.	processes: cell cycle, proliferation, differentiation and aging of cells, apoptosis and necrosis and their significance for the functioning of the organism;
B.W19.	in the basic scope, the problems of stem cells and their application in medicine;
B.W20.	the basics of excitation and conduction in the nervous system and higher nervous functions, as well as the physiology of striated and smooth muscles and blood functions;
B.W21.	the activity and mechanisms of regulation of all organs and systems of the human body, including the circulatory system, respiratory system, digestive system, urinary system and skin integuments, and the relationships between them;
B.W22.	the course and regulation of reproductive functions in women and men;
B.W23.	the mechanism of aging of the body;
B.W24.	basic quantitative parameters describing the efficiency of individual systems and organs, including norm ranges and demographic factors influencing the value of these parameters;
B.W25.	the relationship between factors disturbing the equilibrium state of biological processes and physiological and pathophysiological changes;
B.W26.	basic computer and biostatistical tools used in medicine, including medical databases, spreadsheets and basic computer graphics;
B.W27.	basic statistical analysis methods used in population and diagnostic studies;
B.W28.	possibilities of modern telemedicine as a tool to support the work of a doctor;
B.W29.	principles of conducting scientific, observational and experimental research and in vitro studies serving the development of medicine.
C.W1.	basic concepts in genetics;
C.W2.	phenomena of gene linkage and interaction;
C.W3.	normal human karyotype and different types of sex determination;
C.W4.	the structure of chromosomes and the molecular basis of mutagenesis;
C.W5.	principles of inheritance of different number of traits, inheritance of quantitative traits, independent inheritance of traits and inheritance of extranuclear genetic information;
C.W6.	genetic determinants of human blood groups and serological conflict in the Rh system;
C.W7.	autosome and heterosome aberrations causing diseases, including oncogenesis and cancers;
C.W8.	factors influencing the primary and secondary genetic balance of the population;

C.W9.	basics of diagnosing gene and chromosomal mutations responsible for hereditary and acquired diseases, including cancer;
C.W10.	benefits and threats resulting from the presence of genetically modified organisms (GMOs) in the ecosystem;
C.W11.	genetic mechanisms of acquiring drug resistance by microorganisms and cancer cells;
C.W12.	microorganisms, including pathogenic microorganisms and those present in the physiological flora;
C.W13.	epidemiology of viral and bacterial infections and fungal and parasitic infections, including the geographical range of their occurrence;
C.W14.	the impact of abiotic and biotic (viruses, bacteria) environmental factors on the human body and the human population and the ways in which they enter the human body;
C.W15.	consequences of exposure of the human body to various chemical and biological factors and principles of prevention;
C.W16.	invasive forms or developmental stages of selected parasitic fungi, protozoa, helminths and arthropods, taking into account the geographical range of their occurrence;
C.W17.	the principle of functioning of the parasite-host system and the basic symptoms of diseases caused by parasites;
C.W18.	symptoms of iatrogenic infections, their spreading routes and pathogens causing changes in individual organs;
C.W19.	basics of microbiological and parasitological diagnostics;
C.W20.	basics of disinfection, sterilisation and aseptic procedures;
C.W21.	basics of development and mechanisms of immune system function, including specific and nonspecific mechanisms of humoral and cellular immunity;
C.W22.	major histocompatibility complex;
C.W23.	types of hypersensitivity reactions, types of immunodeficiencies and the basics of immunomodulation;
C.W24.	issues in the field of tumor immunology;
C.W25.	genetic basis of donor and recipient selection and basics of transplant immunology;
C.W26.	pathomorphological nomenclature;
C.W27.	basic mechanisms of cell and tissue damage;
C.W28.	clinical course of specific and nonspecific inflammation and tissue and organ regeneration processes;
C.W29.	definition and pathophysiology of shock, with particular emphasis on differentiating the causes of shock and multi-organ failure;
C.W30.	etiology of hemodynamic disorders, regressive changes and progressive changes;
C.W31.	issues related to detailed organ pathology, macro- and microscopic images and clinical course of pathomorphological changes in individual organs;
C.W32.	consequences of developing pathological changes for topographically adjacent organs;
C.W33.	external and internal pathogenic factors, modifiable and non-modifiable;
C.W34.	clinical forms of the most common diseases of individual systems and organs, metabolic diseases and disorders of water-electrolyte, hormonal and acid-base balance;
C.W35.	individual groups of medicinal products;
C.W36.	main mechanisms of drug action and their age-dependent transformations in the body;
C.W37.	the influence of disease processes on drug metabolism and elimination;

C.W38.	basic principles of pharmacotherapy;
C.W39.	major adverse drug reactions, including those resulting from their interactions;
C.W40.	the problem of drug resistance, including multidrug resistance;
C.W41.	indications for genetic testing to individualize pharmacotherapy;
C.W42.	basic directions of development of therapy, in particular possibilities of cell, gene and targeted therapy in specific diseases;
C.W43.	basic concepts in the field of general toxicology;
C.W44.	groups of drugs, the abuse of which can lead to poisoning;
C.W45.	symptoms of the most common acute poisonings, including alcohol, drugs and other psychoactive substances, heavy metals and selected groups of drugs;
C.W46.	basic principles of diagnostic procedures in poisonings;
C.W47.	the impact of oxidative stress on cells and its importance in the pathogenesis of diseases and in the aging process;
C.W48.	consequences of vitamin or mineral deficiency and their excess in the body;
C.W49.	enzymes involved in digestion, the mechanism of hydrochloric acid production in the stomach, the role of bile, the process of absorption of digestive products;
C.W50.	consequences of improper nutrition, including prolonged fasting, taking too abundant meals and using an unbalanced diet, and disorders of digestion and absorption of digestive products;
C.W51.	mechanism of action of hormones;
D.W1.	social dimension of health and disease, the influence of the social environment (family, networks of social relations) and social inequalities and socio-cultural differences on health status, as well as the role of social stress in health and self- destructive behaviors;
D.W2.	social factors influencing behaviors in health and disease, especially in chronic disease;
D.W3.	forms of violence, models explaining domestic violence and violence in selected institutions, social determinants of various forms of violence and the role of the physician in recognizing it;
D.W4.	social attitudes towards the importance of health, illness, disability and old age, social consequences of illness and disability and socio-cultural barriers, as well as the concept of quality of life determined by health condition;
D.W5.	principles and methods of communication with the patient and his/her family, which serve to build an empathetic, trust-based relationship;
D.W6.	the importance of verbal and non-verbal communication in the process of communicating with the patient and the concept of trust in interaction with the patient;
D.W7.	psychosocial consequences of hospitalization and chronic disease;
D.W8.	functioning of healthcare system entities and the social role of the doctor;
D.W9.	basic psychological mechanisms of human functioning in health and in illness;
D.W10.	the role of the patient's family in the treatment process;
D.W11.	the issue of adaptation of the patient and his family to illness as a difficult situation and to events related to it, including dying and the family's mourning process;
D.W12.	the role of stress in the etiopathogenesis and course of diseases and mechanisms of coping with stress;
D.W13.	mechanisms, goals and methods of treating addictions to psychoactive substances;
D.W14.	principles of health promotion, its tasks and main directions of action, with particular emphasis on knowledge of the role of elements of a healthy lifestyle;
D.W15.	principles of motivating the patient to adopt pro-health behaviors and informing about an

	unfavorable prognosis;
D.W16.	main concepts, theories, ethical principles serving as a general framework for the proper interpretation and analysis of moral and medical issues;
D.W17.	patient rights;
D.W18.	principles of teamwork;
D.W19.	cultural, ethnic and national determinants of human behavior;
D.W20.	history of medicine, medicine of primitive peoples and the oldest civilizations, and characteristic features of medieval medicine;
D.W21.	features of modern medicine and its most important discoveries;
D.W22.	the process of developing new specializations in the field of scientific discipline – medical sciences and the achievements of leading representatives of Polish and world medicine;
D.W23.	the foundations of evidence-based medicine.
E.W1.	environmental and epidemiological conditions of the most common diseases;
E.W2.	principles of feeding healthy and sick children, including breastfeeding, vaccinations and keeping a child's health assessment;
E.W3.	causes, symptoms, principles of diagnosis and therapeutic procedures in the case of the most common diseases of children: 1) rickets, tetany, convulsions, 2) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, heart rhythm disorders, heart failure, hypertension, fainting, 3) acute and chronic diseases of the upper and lower respiratory tract, congenital defects of the respiratory system, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema, 4) anemia, hemorrhagic diathesis, bone marrow failure, childhood cancers, including solid tumors typical of childhood, 5) acute and chronic abdominal pain, vomiting, diarrhea, constipation, bleeding from the gastrointestinal tract, peptic ulcer disease, nonspecific intestinal diseases, pancreas diseases, cholestasis and liver diseases and other acquired diseases and congenital defects of the digestive tract, 6) urinary tract infections, congenital defects of the urinary tract, nephrotic syndrome, nephrolithiasis, acute and chronic renal failure, acute and chronic nephritis, systemic kidney diseases, urination disorders, vesicoureteral reflux disease, 7) growth disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, maturation disorders and gonadal function, 8) cerebral palsy, encephalitis and meningitis, epilepsy, 9) the most common infectious diseases of childhood, 10) genetic syndromes, 11) connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus erythematosus, dermatomyositis;
E.W4.	issues of abused and sexually abused children, mental retardation and behavioral disorders – psychoses, addictions, feeding and excretion disorders in children;
E.W5.	basic methods of fetal diagnosis and therapy;
E.W6.	most common life-threatening conditions in children and principles of conduct in these conditions;
E.W7.	causes, symptoms, principles of diagnosis and therapeutic procedures in relation to the most common internal diseases occurring in adults and their complications: 1) circulatory system diseases, including ischemic heart disease, heart defects, endocardium diseases, heart muscle diseases, pericardium diseases, heart failure (acute and chronic), arterial and venous vessel diseases, arterial hypertension - primary and

	secondary, pulmonary hypertension, 2) respiratory system diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchiectasis, cystic fibrosis, respiratory tract infections, interstitial lung diseases, pleura, mediastinum, obstructive and central sleep apnea, respiratory failure (acute and chronic), respiratory system cancers, 3) digestive system diseases, including diseases of the oral cavity, esophagus, stomach and duodenum, intestines, pancreas, liver, bile ducts and gallbladder, 4) diseases of the endocrine system, including diseases of the hypothalamus and pituitary gland, thyroid, parathyroid glands, adrenal cortex and medulla, ovaries and testicles, as well as neuroendocrine tumors, multiglandular syndromes, various types of diabetes and metabolic syndrome – hypoglycemia, obesity, dyslipidemia, 5) kidney and urinary tract diseases, including acute and chronic renal failure, glomerular and interstitial kidney diseases, kidney cysts, nephrolithiasis, urinary tract infections, urinary tract tumors, in particular the bladder and kidney, 6) haematopoietic system diseases, including bone marrow aplasia, anemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute leukemia, myeloproliferative and myelodysplastic neoplasms, myelodysplastic syndromes, tumors from mature B and T lymphocytes, hemorrhagic diathesis, thrombophilia, life-threatening conditions in hematology, blood disorders in diseases of other organs, 7) rheumatic diseases, including systemic connective tissue diseases, systemic vasculitis, arthritis with spinal involvement, metabolic bone diseases, in particular osteoporosis and degenerative joint disease, gout, allergic diseases, including anaphylaxis and anaphylactic shock and angioedema
E.W8.	the course and symptoms of the aging process and the principles of comprehensive geriatric assessment and interdisciplinary care in relation to the elderly patient;
E.W9.	causes and basic differences in the most common diseases occurring in the elderly and principles of treatment in basic geriatric syndromes;
E.W10.	basic principles of pharmacotherapy of diseases of the elderly;
E.W11.	hazards associated with hospitalization of the elderly;
E.W12.	basic principles of organizing care for the elderly and the burden on the caregiver of the elderly;
E.W13.	basic sets of neurological symptoms;
E.W14.	causes, symptoms, principles of diagnosis and therapeutic procedures in the most common diseases of the nervous system, including: 1) headaches: migraine, tension headache and headache syndromes and neuralgia of the V nerve, 2) vascular diseases of the brain, in particular stroke, 3) epilepsy, 4) infections of the nervous system, in particular meningitis, Lyme disease, herpes encephalitis, neurotransmission diseases, 5) dementias, in particular Alzheimer's disease, frontal dementia, vascular dementia and other dementia syndromes, 6) diseases of the basal ganglia, in particular Parkinson's disease, 7) demyelinating diseases, in particular multiple sclerosis,

	8) diseases of the neuromuscular system, in particular amyotrophic lateral sclerosis and sciatica, 9) craniocerebral injuries, especially concussion;
E.W15.	basic concepts of the pathogenesis of mental disorders;
E.W16.	general symptomatology of mental disorders and principles of their classification according to the main classification systems;
E.W17.	symptoms, principles of diagnosis and therapeutic procedures in the most common mental disorders, including: 1) schizophrenia, 2) affective disorders, 3) neurotic and adaptive disorders, 4) eating disorders, 5) disorders related to taking psychoactive substances, 6) sleep disorders;
E.W18.	principles of diagnostics and procedure in emergencies in psychiatry, including the issue of suicide;
E.W19.	specificity of mental disorders and their treatment in children, adolescents and in old age;
E.W20.	symptoms of mental disorders in the course of somatic diseases, their impact on the course of the underlying disease and prognosis, and principles of their treatment;
E.W21.	issues of human sexuality and basic disorders related to it;
E.W22.	regulations concerning mental health protection, with particular emphasis on the principles of admission to a psychiatric hospital;
E.W23.	environmental and epidemiological conditions of the most common cancers;
E.W24.	basics of early cancer detection and principles of screening tests in oncology;
E.W25.	possibilities of modern cancer therapy, including multimodal therapy, perspectives of cell and gene therapies and their undesirable effects;
E.W26.	principles of combination therapies in oncology, algorithms of diagnostic and therapeutic procedures in the most common cancers;
E.W27.	principles of diagnosis and therapeutic management in the most common problems of palliative medicine, including: 1) symptomatic treatment of the most common somatic symptoms, 2) management of cancer cachexia and prevention and treatment of pressure sores, 3) the most common emergencies in palliative medicine;
E.W28.	principles of palliative care for terminally ill patients;
E.W29.	principles of pain management, including cancer and chronic pain;
E.W30.	concepts of disability and invalidity;
E.W31.	the role of medical rehabilitation and the methods used in it;
E.W32.	basic issues of prevention and principles of conduct in the event of occupational exposure to dangerous and harmful factors;
E.W33.	principles of conduct in the event of detection of an infectious disease;
E.W34.	causes, symptoms, principles of diagnosis and therapeutic and preventive treatment of the most common bacterial, viral, parasitic and fungal diseases, including pneumococcal infections, viral hepatitis, acquired immunodeficiency syndrome (AIDS), sepsis and hospital infections;
E.W35.	basic features, environmental and epidemiological conditions of the most common skin diseases;
E.W36.	causes, symptoms, principles of diagnosis and therapeutic management of the most common sexually transmitted diseases;

E.W37.	causes, symptoms, principles of diagnosis and therapeutic management of the most common hereditary diseases;
E.W38.	causes, symptoms, principles of diagnosis and therapeutic procedures in the most common diseases and specific problems in the practice of a family doctor;
E.W39.	types of biological materials used in laboratory diagnostics and principles of collecting material for testing;
E.W40.	theoretical and practical foundations of laboratory diagnostics;
E.W41.	possibilities and limitations of laboratory tests in emergency situations;
E.W42.	indications for the implementation of monitored therapy;
E.W43.	basic pharmacoeconomic concepts.
F.W1.	causes, symptoms, principles of diagnosis and therapeutic procedures in relation to the most common diseases requiring surgical intervention, taking into account the specifics of childhood, including in particular: 1) acute and chronic diseases of the abdominal cavity, 2) diseases of the chest, 3) diseases of the limbs and head, 4) bone fractures and organ injuries;
F.W2.	selected issues in the field of pediatric surgery, including traumatology and otorhinolaryngology, and defects and acquired diseases that are an indication for surgical treatment in children;
F.W3.	principles of qualification for basic surgical procedures and invasive diagnostic and therapeutic procedures, principles of their performance and the most common complications;
F.W4.	principles of perioperative safety, preparation of the patient for surgery, performance of general and local anesthesia and controlled sedation;
F.W5.	postoperative treatment with analgesic therapy and postoperative monitoring;
F.W6.	indications and principles of intensive care;
F.W7.	guidelines for cardiopulmonary resuscitation of newborns, children and adults;
F.W8.	principles of operation of the integrated State Medical Rescue system;
F.W9.	female reproductive functions, disorders related to them and diagnostic and therapeutic procedures concerning in particular: 1) menstrual cycle and its disorders, 2) pregnancy, 3) physiological and pathological childbirth and puerperium, 4) inflammations and neoplasms in the genital area, 5) birth regulation, 6) menopause, 7) basic diagnostic methods and gynecological procedures;
F.W10.	issues of 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 preparation of the patient for particular types of imaging tests and contraindications to the use of contrast agents
F.W11.	issues related to diseases of the organ of vision, in particular: 1) causes, symptoms, principles of diagnosis and therapeutic procedures in the most common ophthalmological diseases, 2) ophthalmological complications of systemic diseases together with their ophthalmological symptomatology and correct methods of treatment in

	these cases, 3) surgical procedures in individual eye diseases, 4) basic groups of drugs used in ophthalmology, their adverse effects and interactions, groups of drugs used generally, which are associated with ophthalmological complications and contraindications and their mechanism;
F.W12.	issues in the field of laryngology, phoniatrics and audiology, including: 1) causes, clinical course, treatment methods, complications and prognosis in diseases of the ear, nose, paranasal sinuses, oral cavity, pharynx and larynx, 2) diseases of the facial nerve and selected structures of the neck, 3) principles of diagnostic and therapeutic procedures in mechanical injuries of the ear, nose, larynx and esophagus, 4) principles of emergency procedures in otorhinolaryngology, in particular in laryngeal dyspnea, 5) principles of diagnostic and therapeutic procedures in hearing, voice and speech disorders, 6) principles of diagnostic and therapeutic procedures in head and neck cancers;
F.W13.	causes, symptoms, principles of diagnosis and therapeutic procedures in the case of the most common diseases of the central nervous system in the scope of: 1) cerebral edema and its consequences, with particular emphasis on emergency conditions, other forms of intracranial compression with their consequences, 2) craniocerebral injuries, 3) vascular defects of the central nervous system, 4) tumors of the central nervous system, 5) diseases of the spine and spinal cord;
F.W14.	in the basic scope of the issues of surgical transplantology, indications for transplantation of irreversibly damaged organs and tissues and procedures related to this;
F.W15.	principles of raising suspicion and recognizing brain death;
F.W16.	algorithm of procedures for individual stages of accidental hypothermia and post-traumatic hypothermia.
G.W1.	methods of assessing the health status of an individual and the population, various classification systems of diseases and medical procedures;
G.W2.	methods of identifying and studying risk factors, advantages and disadvantages of various types of epidemiological studies and measures indicating the presence of a cause-effect relationship;
G.W3.	epidemiology of infectious and chronic diseases, methods of preventing their occurrence at various stages of the natural history of the disease and the role of epidemiological surveillance;
G.W4.	the concept of public health, its goals, tasks and the structure and organization of the health care system at the national and global level, as well as the impact of economic conditions on the possibilities of health care;
G.W5.	legal regulations concerning the provision of health services, patient rights, labor law, the basics of practicing the medical profession and the functioning of the medical self-government;
G.W6.	basic legal regulations concerning the organization and financing of the healthcare system, universal health insurance and the principles of organizing healthcare entities;
G.W7.	legal obligations of a doctor in the area of determining death;
G.W8.	legal regulations and basic methods concerning medical experiments and conducting other medical research, including basic methods of data analysis;
G.W9.	legal regulations concerning transplants, artificial procreation, termination of pregnancy, aesthetic procedures, palliative treatment, mental illnesses;
G.W10.	basic regulations in the field of pharmaceutical law;

G.W11.	legal regulations concerning medical confidentiality, keeping medical records, criminal, civil and professional liability of a doctor;
G.W12.	The concept of violent death and sudden death, as well as the differences between trauma and injury;
G.W13.	the legal basis and principles of medical procedure during the examination of a corpse at the scene of its discovery and the forensic medical examination of a corpse;
G.W14.	the principles of forensic medical diagnostics and expert opinions in cases involving infanticide and the reconstruction of the circumstances of a road accident;
G.W15.	principles of preparing expert opinions in criminal cases;
G.W16.	principles of issuing forensic medical opinions regarding the ability to participate in procedural activities, biological effects and damage to health;
G.W17.	the concept of medical error, the most common causes of medical errors and principles of issuing opinions in such cases;
G.W18.	principles of collecting material for toxicological and hemogenetic studies.
Skills: a graduate can	
A.U1.	operate an optical microscope, including the use of immersion;
A.U2	recognize in images from an optical or electron microscope histological structures corresponding to organs, tissues, cells and cellular structures, 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 based on intravital diagnostic tests, particularly in the field of radiology (plain radiographs, studies using contrast agents, computed tomography and nuclear magnetic resonance imaging);
A.U5.	use anatomical, histological and embryological terminology in speech and writing.
B.U1.	use knowledge of the laws of physics to explain the influence of external factors such as temperature, acceleration, pressure, electromagnetic fields and ionizing radiation on the body and its parts;
B.U2.	assess the harmfulness of ionizing radiation dose and adhere to the principles of radiological protection;
B.U3.	calculate molar and percentage concentrations of compounds and concentrations of substances in isoosmotic, single- and multi-component solutions;
B.U4.	calculate the solubility of inorganic compounds, determine the chemical basis of the solubility of organic compounds or its lack and its practical importance 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 cells;
B.U7.	perform simple functional tests assessing the human body as a stable regulation system (load tests, exercise tests) and interpret numerical data concerning basic physiological variables;
B.U8.	use basic laboratory techniques such as qualitative analysis, titration, colorimetry, pH measurement, chromatography, protein and nucleic acid electrophoresis;
B.U9.	operate simple measuring devices and evaluate the accuracy of the measurements performed;
B.U10.	use databases, including online ones, and search for the necessary information using available tools;
B.U11.	select an appropriate statistical test, perform basic statistical analyses, use appropriate methods of reporting results, interpret the results of meta-analysis, and perform survival probability analysis;
B.U12.	explain the differences between prospective and retrospective studies, randomised and case-control studies, case reports and experimental studies, and rank them according to the reliability and quality of scientific evidence;

B.U13.	plan and carry out simple scientific research, interpret the results and draw conclusions.
C.U1.	analyze genetic crosses and pedigrees of human traits and diseases, and assess the risk of a child being born with chromosomal aberrations;
C.U2.	identify indications for prenatal testing;
C.U3.	make decisions about the need for cytogenetic and molecular testing;
C.U4.	perform morphometric measurements, analyze morphograms and record karyotypes of diseases;
C.U5.	estimate the risk of a given disease manifesting in offspring based on family predispositions and the influence of environmental factors;
C.U6.	assess environmental threats and use basic methods to detect the presence of harmful factors (biological and chemical) in the biosphere;
C.U7.	recognize the most common human parasites based on their structure, life cycles, and disease symptoms;
C.U8.	use the antigen-antibody reaction in current modifications and techniques for diagnosing infectious, allergic, autoimmune, and neoplastic diseases, as well as blood diseases;
C.U9.	prepare slides and identify pathogens under a microscope;
C.U10.	interpret the results of microbiological tests;
C.U11.	relate images of tissue and organ damage to clinical symptoms of disease, history, and laboratory test results;
C.U12.	analyze reactive, defensive and adaptive phenomena and regulation disorders caused by the etiological factor;
C.U13.	perform simple pharmacokinetic calculations;
C.U14.	select drugs in appropriate doses to correct pathological phenomena in the body and in individual organs;
C.U15.	design schemes for rational chemotherapy of infections, empirical and targeted;
C.U16.	prepare records of all prescription forms of medicinal substances;
C.U17.	use pharmaceutical information and databases on medicinal products;
C.U18.	estimate toxicological hazards in specific age groups and in conditions of liver and kidney failure and prevent drug poisoning;
C.U19.	interpret the results of toxicological tests;
C.U20.	describe changes in the functioning of the body in a situation of homeostasis disturbance, in particular determine its integrated response to physical exertion, exposure to high and low temperatures, loss of blood or water, sudden verticalization, transition from sleep to wakefulness.
D.U1.	take into account the patient's subjective needs and expectations resulting from socio-cultural conditions in the therapeutic process;
D.U2.	recognize signs of anti-health and self-destructive behaviors and respond to them appropriately;
D.U3.	choose a treatment that minimizes the social consequences for the patient;
D.U4.	build an atmosphere of trust throughout the diagnostic and treatment process;
D.U5.	conduct a conversation with an adult patient, child and family using active listening and empathy expression techniques and talk to the patient about his or her life situation;
D.U6.	Inform the patient about the purpose, course, and potential risks of the proposed diagnostic or therapeutic actions, and obtain their informed consent to proceed with these actions;
D.U7.	engage the patient in the therapeutic process;

D.U8.	provide information to the patient and his family about the unfavorable prognosis;
D.U9.	provide advice on compliance with therapeutic recommendations and a healthy lifestyle;
D.U10.	identify risk factors for violence, recognize violence and respond appropriately;
D.U11.	use basic psychological interventions to motivate and support;
D.U12.	communicate with colleagues, providing feedback and support;
D.U13.	adhere to ethical standards in professional conduct;
D.U14.	recognize the ethical dimension of medical decisions and distinguish factual from normative aspects;
D.U15.	respect patient rights;
D.U16.	demonstrate responsibility for improving one's skills and passing on knowledge to others;
D.U17.	critically analyse medical literature, including in English, and draw conclusions;
D.U18.	communicate with a patient in one of the foreign languages at the B2+ level of the Common European Framework of Reference for Languages.
E.U1.	conduct a medical interview with an adult patient;
E.U2.	conduct a medical interview with a child and his/her family;
E.U3.	conduct a complete and focused physical examination of an adult patient;
E.U4.	conduct a physical examination of a child of any age;
E.U5.	conduct a psychiatric examination;
E.U6.	conduct an orientation test of hearing and visual field and an otoscopic examination;
E.U7.	assess the patient's general condition, state of consciousness and awareness;
E.U8.	assess the newborn's condition on the Apgar scale and its maturity and examine neonatal reflexes;
E.U9.	compare anthropometric and blood pressure measurements with data on centile charts;
E.U10.	assess the stage of puberty;
E.U11.	conduct check-ups;
E.U12.	perform differential diagnosis of the most common diseases of adults and children;
E.U13.	assess and describe the patient's somatic and mental state;
E.U14.	recognize conditions that pose a direct threat to life;
E.U15.	recognize the state after the consumption of alcohol, drugs and other stimulants;
E.U16.	plan diagnostic, therapeutic and preventive procedures;
E.U17.	analyze possible adverse effects of individual drugs and interactions between them;
E.U18.	propose individualization of current therapeutic guidelines and other treatment methods in the event of ineffectiveness or contraindications to standard therapy;
E.U19.	recognize symptoms of drug dependence and propose treatment procedures;
E.U20.	qualify the patient for home and hospital treatment;
E.U21.	recognize conditions in which life expectancy, functional status, or patient preferences limit management according to disease-specific guidelines;

E.U22.	perform a functional assessment of a patient with a disability;
E.U23.	propose a rehabilitation program for the most common diseases;
E.U24.	interpret laboratory test results and identify causes of deviations from the norm;
E.U25.	administer nutritional therapy, including enteral and parenteral nutrition;
E.U26.	plan the procedure in the event of exposure to a blood-borne infection;
E.U27.	qualify the patient for vaccinations;
E.U28.	collect and secure material for tests used in laboratory diagnostics;
E.U29.	perform basic medical procedures and treatments, including: 1) measurement of body temperature (superficial and deep), pulse measurement, non-invasive blood pressure measurement, 2) monitoring of vital signs using a cardiomonitor, pulse oximetry, 3) spirometric testing, oxygen therapy, assisted and substitute ventilation, 4) insertion of an oropharyngeal tube, 5) intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of blood for culture, collection of arterial blood, collection of arterialized capillary blood, 6) taking swabs from the nose, throat and skin, 7) catheterization of the urinary bladder in women and men, gastric probing, gastric lavage, enema, 8) standard resting electrocardiogram with interpretation, electrical cardioversion and defibrillation of the heart, 9) simple strip tests and measurement of blood glucose;
E.U30.	assist in performing the following medical procedures and treatments: 1) transfusion of blood products and blood derivatives, 2) drainage of the pleural cavity, 3) puncture of the pericardial sac, 4) puncture of the peritoneal cavity, 5) lumbar puncture, 6) fine-needle biopsy, 7) skin tests, 8) intradermal and scarification tests and interpret their results;
E.U31.	interpret the pharmaceutical characteristics of medicinal products and critically evaluate advertising materials for medicines;
E.U32.	plan specialist consultations;
E.U33.	implement basic treatment procedures in acute poisonings
E.U34.	monitor the condition of a patient poisoned by chemicals or drugs;
E.U35.	assess pressure sores and apply appropriate dressings;
E.U36.	treat injuries (apply a dressing or immobilization, dress and suture the wound);
E.U37.	recognize the patient's agony and confirm his death;
E.U38.	maintain the patient's medical records.
F.U1.	assist with a typical surgical procedure, prepare the surgical site and locally anaesthetize the surgical area;
F.U2.	use basic surgical instruments;

F.U3.	follow the rules of asepsis and antisepsis;
F.U4.	dress a simple wound, apply and change a sterile surgical dressing;
F.U5.	insert a peripheral catheter;
F.U6.	examine the nipples, lymph nodes, thyroid gland and abdominal cavity in the aspect of acute abdomen and perform a digital rectal examination;
F.U7.	evaluate the result of radiological examination in the scope of the most common types of fractures, especially fractures of long bones;
F.U8.	perform emergency immobilization of the limb, select the type of immobilization necessary for use in typical clinical situations and monitor the correct blood supply to the limb after applying the immobilization dressing;
F.U9.	treat external bleeding;
F.U10.	perform basic resuscitation procedures using an automated external defibrillator and other life-saving procedures and provide first aid;
F.U11.	follow the advanced resuscitation algorithm;
F.U12.	monitor the patient's condition in the postoperative period based on basic vital signs;
F.U13.	recognize subjective and objective symptoms indicating an abnormal course of pregnancy (abnormal bleeding, uterine contractions);
F.U14.	interpret the results of a physical examination of a pregnant woman (blood pressure, maternal and fetal heart rate) and the results of laboratory tests indicating pregnancy pathologies;
F.U15.	interpret the cardiotocography (CTG) record;
F.U16.	recognize the onset of labor and abnormal duration of labor;
F.U17.	interpret subjective and objective symptoms during the puerperium;
F.U18.	establish recommendations, indications and contraindications for the use of contraceptive methods;
F.U19.	conduct ophthalmological screening examinations;
F.U20.	recognize ophthalmological conditions requiring immediate specialist assistance and provide initial, qualified assistance in cases of physical and chemical eye injuries;
F.U21.	assess the condition of an unconscious patient according to international scoring scales;
F.U22.	recognize the symptoms of increasing intracranial pressure;
F.U23.	assess the indications for suprapubic puncture and participate in its performance;
F.U24.	assist in typical urological procedures (diagnostic and therapeutic endoscopy of the urinary system, lithotripsy, prostatic puncture);
F.U25.	perform a basic ENT examination of the ear, nose, throat and larynx;
F.U26.	perform an indicative hearing test.
G.U1.	describe the demographic structure of the population and, on this basis, assess the health problems of the population;
G.U2.	collect information on the presence of risk factors for infectious and chronic diseases and plan preventive measures at various levels of prevention;
G.U3.	interpret measures of diseases and disability incidence;
G.U4.	assess the epidemiological situation of diseases commonly occurring in the Republic of Poland and worldwide;
G.U5.	explain to people using medical services their basic rights and the legal basis for providing these services;

G.U6.	prepare medical certificates for the needs of patients, their families and other entities;
G.U7.	recognize behaviors and symptoms during the examination of a child that indicate the possibility of violence against a child;
G.U8.	act in a way that allows medical errors to be avoided;
G.U9.	collect blood for toxicological tests and secure material for hemogenetic tests.
EK.01.	undertake health-promoting and educational activities, using in practice knowledge and skills in various forms of physical activity.
EK.02.	create values of physical activity as a form of physical and mental relaxation and promotes a positive health-promoting attitude that affects functional efficiency in adult life.
Social competences: a graduate is ready to	
K.01	establish and maintain a deep and respectful contact with the patient, as well as showing understanding for ideological and cultural differences;
K.02	be guided by the patient's best interests;
K.03	comply with medical confidentiality and patient rights;
K.04	take action towards the patient based on ethical principles, with awareness of the social conditions and limitations resulting from the disease;
K.05	detect and recognise his/her own limitations and making self-assessment of educational deficits and needs;
K.06	promote health-promoting behaviors;
K.07	use objective sources of information;
K.08	formulate conclusions from his/her own measurements or observations;
K.09	implement the principles of professional camaraderie and cooperation within a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment;
K.10	formulate opinions on various aspects of professional activity;
K.11	accept responsibility for decisions made in the course of professional activity, including those relating to one's own safety and the safety of others.

President of the Senate
of the University of Rzeszów

Prof. Sylwester Czopek, PhD Rector

Appendix No. 3.3. to Resolution No. 210/01/2023 of the Senate of the UR
dated January 26, 2023.

CHARACTERISTICS AND CONDITIONS OF THE STUDY PROGRAM

Valid from the academic year 2022/2023

Name of the field of study		Medicine	
Level of studies		Uniform Master's degree studies	
Profile of studies		General Academic	
1.	Total numer of hours	Full-time	Part-time
		5849	5849
2.	Number of ECTS points for each discipline within the total number of ECTS points required to complete studies in the field	364	
3.	The total number of ECTS points that a student must earn through activities conducted with the direct participation of academic staff or other individuals conducting the classes	Full-time	Part-time
		280	280
4.	The number of ECTS points that a student must earn through courses in the field of humanities or social sciences, not less than 5 ECTS points – in the case of study programs assigned to disciplines within fields other than humanities or social sciences.	5	
5.	The number of ECTS points that a student must earn through elective courses (not less than 3% of the total number of ECTS points)	11	
6.	The number of hours of physical education courses (for first-cycle studies and uniform master's studies conducted in full-time format)	60	
7.	Total number of ECTS points assigned to courses that develop practical skills – applies to the practical profile	not applicable	
8.	Total number of ECTS points assigned to courses related to scientific activity in the discipline(s) to which the field of study is assigned, including preparation for and participation in scientific work – applies to the general academic profile	202	
9.	Duration, principles, and forms of professional practice and the number of ECTS points assigned to the practice	Number of hours: 600 Duration: 20 weeks ECTS points: 20 Method of implementation and conditions for participation in the practice: Practices in hospital departments based on referrals.	
10.	Description of the methods for verifying and assessing the learning outcomes	**Verification of knowledge**: written exams, written and/or oral partial and final tests, term papers, presentations.	

	achieved by the student during the entire course of studies	**Verification of skills and social competencies**: practical assessments, clinical exams, standardized OSCE exam, observation of the student during classes. The detailed forms of verification of the learning outcomes are specified in the course syllabi.
11.	Conditions for completing the studies	Passing all exams, assessments, and professional practice.

Conditions for completion of the study program - English Division

	Subjects or groups of subjects	Learning outcomes assigned to subjects/groups of subjects	Number of hours		Form of assessment	ECTS points
			Full-time	Part-time		
	General subjects					
1.	**Physical education**	EK.01.- EK.02.	60	60	***ZO***	0
			Σ 60	Σ 60		Σ 0
	A. Morphological subjects					
2.	**Anatomy**	A.W1.- A.W3., A.U3.-A.U5., K.05, K.08, K.11	200	200	E	17
3.	**Histology, embryology and cytophysiology**	A.W1.; A.W4.;A.W5.; A.W6.;A.U1.; A.U2.; A.U5.; K.05; K.07; K.08;K.11;	115	115	E	10
			∑ 315	∑ 315		∑ 27
	B. Scientific Foundations of Medicine					
4.	**Biophysics**	B.W5.-B.W6.,B.W8.-B.W9; B.U1.-B.U2.	50	50	ZO	5
5.	**Molecular biology**	B.W13.- B.W14.,B.W29.,B.U8., B.U9.	40	40	ZO	3
6.	**Biochemistry with elements of chemistry**	B.W2.; B.W3.;B.W4.; B.W10.;B.W11.;B.W12.;B.W13.;B.W15.;B.W16.; C.W51.;B.U3.; B.U4.; B.U5.;B.U6.; B.U8.;B.U9.;K.05; K.07; K.08;K.11;	170	170	E	14
7.	**Physiology**	B.W1.;B.W2.;B.W5.; B.W7.,B.W17.;B.W18.; B.W20.; B.W21.;B.W22.; B.W23.; B.W24.; B.W25.;C.W6.; C.W47;C.W48; C.W49; C.W50; C.W51.; B.U7.; B.U9.; K.05; K.08;K.11;	180	180	E	15
8.	**Cytophysiology**	B.W17.B.W18.; B.W19.; K.05; K.07; K.08;	14	14	ZO	1
9	**Information technology and biostatistics**	B.W26.; B.W27.;B.W28.; B.U10.;B.U11.; B.U12.;	30	30	ZO	2
10	**Diagnostic systems in medicine**	B.W5.; B.W6.;B.W8.;B.W9.;	15	15	ZO	1
11	**Research methodology**	B.W29.; D.W23.;G.W8.; B.U10.;B.U12.; B.U13.;D.U17.; K.07;	15	15	ZO	1
12	**Evidence-based medicine**	B.W29.; D.W23.;B.U12.; B.U13.; D.U17.; K.05; K.07;	12	12	ZO	1
			∑ 526	∑ 526		∑ 43
	C. Pre-clinical subjects					
13	**General genetics**	C.W1.; C.W2.;C.W3.; C.W4.;C.W5.; C.W6.;	30	30	ZO	2

		C.W7.; C.W8.; C.U1.;				
14	**Clinical genetics**	C.W7, C.W9.;C.W10.; C.W42.;E.W35.; C.U2; C.U3.;C.U4.; C.U5.; E.U1.;	30	30	E	2
15	**Microbiology with parasitology**	C.W11.; C.W12.;C.W13.; C.W14.;C.W15.; C.W16.;C.W17.; C.W18.;C.W19.; C.W20.; C.U6.; C.U7.; C.U8.; C.U9.; C.U10.;K.05; K.08; K.11;	95	95	E	8
16	**Basic immunology**	B.W29.; C.W21.;C.W22.; C.W23.;C.W24.; C.W25.;C.W42.; B.U.13.;C.U8.; C.U11.; C.U12.;	45	45	E	4
17	**Pathology**	C.W26.; C.W27.;C.W28.; C.W29.;C.W30.; C.W31.;C.W32.; C.W33.;C.W34.; C.U8.;C.U11.; C.U12.;K.05; K.07; K.08;	140	140	E	10
18	**Pharmacology with Toxicology**	C.W35.; C.W36.;C.W37.; C.W38.;C.W39.; C.W40.;C.W41.; C.W43.;C.W44.; C.W45.; C.W46.; D.W13.;G.W10.; C.U13.;C.U14.; C.U15.;C.U16.; C.U17.;C.U18.; C.U19.;E.U14.; E.U19.;E.U31.; E.U33.;E.U34.; K.05; K.07; K.08; K.11;	150	150	E	12
19	**Pathophysiology**	B.W17.; B.W23.,B.W24.; B.W25.; C.W47;C.W48;C.W49; C.W50; C.W51.; B.U7.;C.U11.; C.U12.;C.U20.; K.05; K.08;K.11;	111	111	E	9
20	**Clinical immunology**	C.W21.; C.W22.;C.W23.; C.W24.;C.W25.; C.W42.;E.W2.; E.W3.;E.W7.; E.W25.;E.W34.; C.U8.,C.U11.; C.U12.;K.01; K.02; K.03;K.04; K.05; K.06; K.07;	45	45	E	3
			∑ 646	∑ 646		∑ 50
D. Behavioral and social subjects with elements of professionalism						
21	**Sociology of medicine**	D.W1.; D.W2.;D.W3.; D.W4.;D.W7.; D.W19.; D.U1.; D.U2.;D.U10.; K.09;	30	30	ZO	2
22	**Medical psychology**	D.W4.; D.W5.;D.W7.; D.W8.;D.W9.; D.W10.; D.W11.; D.W12.;D.W13.; D.W15.; D.U4.,D.U5.; D.U6.;D.U7.; D.U8.; D.09.; D.U10.; D.U 11.; D.U12.;	25	25	ZO	2
23	**Medical ethics**	D.W16., D.U13.; D.U14.; D.U15.; K.04;	15	15	ZO	1
24	**History of medicine**	D.W20., D.W21.; D.W22.;	25	25	ZO	2
25	**Elements of professionalism**	D.W1.; D.W4.,D.W6.; D.W7.;D.W8.; D.W17.;D.W18.; D.W19.;D.W23.; D.U1.; D.U2.; D.U3.; D.U4.;D.U5.; D.U6.; D.U7.; D.U9.; D.U12.;D.U13.; D.U15.;D.U16.; D.U17., G.U8.; K.07; K.09;	25	25	ZO	1
26	**English**	A.W1.; D.U17.; D.U18.;	120	120	E	6
27	**Clinical communication**	D.W5.; D.W6.;D.W12.; D.W14.;D.W15.; D.U2.;D.U4.; D.U5.;D.U8.; D.U9.;D.U11.; D.U12.; K.09;	15	15	ZO	1
			∑ 255	∑ 255		∑ 15
E. Non-surgical clinical subjects						
28	**Pediatrics**	E.W1.; E.W2.;E.W3.; E.W4.;E.W6.; E.W34.;E.W37.; E.U2.; E.U4.; E.U7.; E.U8.; E.U9.; E.U10.;E.U12.; E.U14.;E.U16.;	238	238	ZO	14

		E.U24.;E.U25.; E.U27.;E.U29.; E.U30.;E.U32.; E.U37.;E.U38.; K.01; K.02;K.03; K.04; K.05;K.06; K.07; K.08;K.09; K.10; K.11;				
29	**Internal diseases**	E.W1.; E.W7.;E.W41.; E.W42.; E.U1.; E.U3.;E.U7.; E.U12.; E.U14.,E.U15.; E.U16.;E.U24.; E.U25.;E.U29.; E.U30.;E.U32.; E.U37.;E.U38.; K.01; K.02;K.03; K.04; K.05;K.06; K.07; K.08;K.09; K.10; K.11;	264	264	ZO	16
30	**Neurology**	E.W13.; E.W14.; E.U1.; E.U3.; E.U7.; E.U24.;E.U32.;E.U38.; K.01; K.02;K.03; K.04; K.05;K.06; K.07; K.08;K.09; K.10; K.11;	85	85	E	5
31	**Geriatrics**	E.W8.; E.W9.;E.W10.; E.W11.;E.W12.; E.U1.;E.U3.; E.U21.;E.U37.; E.U38.; K.01;K.02; K.03; K.04; K.05; K.06;	20	20	ZO	1
32	**Psychiatry**	E.W4.; E.W15.;E.W16.; E.W17.;E.W18.; E.W19.;E.W20.; E.W21.; E.W22.; E.U1.; E.U5.; E.U6., E.U13.;E.U38.; K.01; K.02; K.03; K.04;	65	65	ZO	4
33	**Dermatology and venereology**	E.W1.; E.W35.;E.W36.; E.U1.;E.U3.; E.U16.;E.U32.; E.U35.;E.U38.; 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
34	**Oncology**	E.W1.; E.W23.;E.W24.; E.W25.;E.W26.; E.W27.;E.W28.; E.W29.; E.U1.; E.U3.; E.U16.; E.U24.; E.U37.;E.U38.; K.01; K.02;K.03; K.04; K.05; K.06; K.07; K.08;K.09; K.10; K.11;	75	75	ZO	4
35	**Family medicine**	E.W1.; E.W38.; E.U1.; E.U2.; E.U3.; E.U4.;E.U11.;E.U12.; E.U16.;E.U20.; E.U24.;E.U27.; E.U36.;E.U38.; K.01; K.02;K.03; K.04; K.05;K.06; K.07; K.08;K.09; K.10; K.11;	70	70	ZO	4
36	**Infectious diseases**	E.W1.; E.W32.;E.W33.; E.W34.;E.U1.; E.U3.;E.U16.; E.U24.;E.U26.; E.U32.,;E.U38.; K.01; K.02;K.03; K.04; K.05;	60	60	E	4
37	**Rehabilitation**	E.W30.; E.W31.;E.U22.; E.U23.;E.U38.; K.01; K.02;K.03; K.04; K.05; K.06;	30	30	ZO	2
38	**Laboratory diagnostics**	E.W5.; E.W7.;E.W39.; E.W40.;E.W41.; C.U8.;E.U24.; E.U28.;	44	44	E	3
39	**Clinical pharmacology**	E.W3.;E.W7.;E.W10.; E.W25.;E.W29.; E.W34.;E.W42.; E.W43.;E.U17.; E.U18.;E.U19.; E.U31.;E.U33.; E.U34.; K.01;K.02; K.03; K.04;K.05; K.06; K.07;	30	30	E	2
40	**Propedeutics of masticatory system disease with elements of dental prophylaxis**	E.W7.; E.W14.;E.W26.; E.U3.;E.U16.; E.U20.;E.U32.; E.U38.;K.01; K.02; K.03; K.04; K.05;	30	30	ZO	2
41	**Propedeutics of internal medicine**	E.W1.; E.U1.; E.U3.; E.U7.; E.U32.;E.U38.; K.01; K.02;K.03; K.04; K.05; K.06;	80	80	ZO	5
42	**Propedeutics of**	E.W1.; E.W23.;E.W24.; E.W25.;E.W28.; E.U1.;	30	30	ZO	2

	oncology	E.U3.; E.U16.;				
43	**Propedeutics of pediatrics**	E.W1.; E.W2.; E.W4.; E.U2.; E.U4.;E.U7.; E.U8.; E.U9.; E.U27.; E.U32.;E.U38.; K.01; K.02;K.03; K.04; K.05;K.06;	85	85	ZO	5
			∑ 1266	∑ 1266		∑ 77
F. Surgical clinical subjects						
44	**Anesthesiology and intensive care**	E.W29.; F.W5.;F.W6.; F.W15.;F.W16.; E.U1.;E.U3.; E.U14.;E.U24.; E.U38.;F.U1.; F.U2; F.U3.;F.U4.; F.U5.; F.U9.; F.U10.; F.U11.;F.U12.; F.U21.;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.W14.; E.U1., E.U2.; E.U3.; E.U4.; E.U24.;E.U32.; E.U35.;E.U36.; E.U38.; F.U1.; F.U2.; F.U3.; F.U4.; F.U6.; F.U9.; K.01; K.02; K.03;K.04; K.05; K.06;K.07; K.08; K.09;K.10; K.11;	220	220	ZO	13
46	**Orthopedics and traumatology of the musculoskeletal system**	F.W1.; F.W2.;F.W3.; F.W5.;F.W7.; E.U1.;E.U3.; E.U36.; E.U38.; F.U1.; F.U2.;F.U3.; F.U4.; F.U7.;F.U8.; K.01; K.02;K.03; K.04; K.05;	75	75	E	5
47	**Emergency medicine**	F.W7.; F.W8.;E.U1.; E.U3.; E.U14.; E.U15.; E.U20.;E.U24.; E.U32.;E.U36.; E.U38.; F.U5.; F.U9.; F.U10.; F.U11.; F.U21.;K.01; K.02; K.03; K.04; K.05;	65	65	ZO	4
48	**Gynecology and obstetrics**	E.W5.; F.W9.; E.U1.; E.U3.; E.U32.;E.U38.; F.U13.;F.U14.; F.U15.;F.U16.; F.U17.;F.U18., K.01; K.02;K.03; K.04; K.05;K.06; K.07; K.08; K.09; K.10; K.11;	180	180	ZO	10
49	**Urology**	E.U1.; E.U3.; E.U38.; F.U6.; F.U23.;F.U24.; K.01; K.02; K.03; K.04;	24	24	ZO	1
50	**Otolaryngology**	F.W1.; F.W2.,;F.W3.; F.W4.;F.W5.; F.W12.;E.U1.; E.U3.;E.U38.; F.U1.; F.U2.; F.U3.; F.U4.; F.U25.; F.U26.;K.01; K.02; K.03; K.04; K.05;	60	60	E	4
51	**Ophthalmology**	F.W11.; E.U1.;E.U3.; E.U38.;F.U19.; F.U20.;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
52	**Neurosurgery**	F.W13.; F.W15.; E.U1.; E.U3.; 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	ZO	2
53	**Transplantology**	F.W14.; F.W15.;G.W9.; C.W25.;	32	32	ZO	2
54	**Diagnostic imaging**	F.W10.; F.U7.;B.U2.; E.U38.;	45	45	E	3
55	**First aid with elements of nursing**	F.W7.; F.W8.;E.U28.; E.U36.;F.U5.; F.U9.;F.U10.; F.U11.;K.05; K.07; K.08; K.11;	30	30	ZO	2
			∑ 906	∑ 906		∑ 54
G. Legal and organizational aspects of medicine						
60	**Hygiene and epidemiology**	G.W1.; G.W2.;G.W3.; G.U2.; G.U4.;	35	35	E	3

61	**Public health**	D.W14.; D.W17.;G.W4.; G.W5.;G.W6.; G.U1.;G.U3.; G.U5.;	20	20	ZO	1
62	**Law and forensic medicine**	G.W5.; G.W6.;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.U5.; G.U6.; G.U7.; G.U8.; G.U9.,	45	45	E	3
			∑ 100	∑ 100		∑ 7
Practical clinical training						
57	**Internal Diseases**	E.W1., E.W7., E.W41., E.W42., E.U1., E.U3., E.U7., E.U12., E.U14., E.U16., E.U24., E.U25., E.U29., E.U30., E.U32., E.U37., E.U38., K.01-K.11	240	240	E	16
58	**Pediatrics**	E.W1., E.W2. E.W3., E.W4., E.W6., E.W34., E.W37., E.U2., E.U4., E.U7., E.U8., E.U9., E.U10., E.U12., E.U14., E.U16., E.U24., E.U25.,E.U27., E.U29., E.U30., E.U32., E.U37., E.U38., K.01-K.11	120	120	E	8
59	**Surgery**	F.W1., F.W2., F.W3., F.W4., F.W5., F.W14., E.U1.- E.U4., E.U24., E.U32., E.U35., E.U36., E.U38., F.U1., F.U2., F.U3., F.U4., F.U6., F.U9., K.01-K.11	120	120	E	8
60	**Gynecology and obstetrics**	E.W5., F.W9., E.U1., E.U3., E.U32., E.U38., F.U13.- F.U18., K.01-K.11	60	60	E	4
61	**Psychiatry**	E.W4., E.W15.-E.W22., E.U1., E.U5., E.U6., E.U13., E.U38., K.01-K.04	60	60	E	4
62	**Emergency medicine**	F.W7., F.W8., E.U1., E.U3., E.U14., E.U15., E.U20., E.U24., E.U32., E.U36., E.U38., F.U5., F.U9., F.U10.,F.U11., F.U21., K.01-K.5	60	60	E	4
63	**Family medicine**	E.W1., E.W38., E.U1., E.U2.,E.U3., E.U4., E.U11., E.U12.,E.U16., E.U20.,E.U24., E.U27., E.U36., E.U38., K.01-K.11	60	60	E	4
64	**A specialty chosen by the student**	Selected learning outcomes depending on the type of specialization	180	180	ZO	12
			Σ 900	Σ900		Σ 60
Group of elective subjects – optional classes						
	Electives *	Selected learning outcomes depending on the type of elective subject	275	275	ZO	11
			Σ 275	Σ 275		Σ 11
Total (the sum includes subjects for one specialization/one educational path)			**Σ 5249**	**Σ 5249**		**Σ 344**
Summer Internships						
Patient care - 4 weeks			120	120	ZO	4
Family medicine - 3 weeks			90	90	ZO	3
Emergency help - 1 week			30	30	ZO	1
Internal diseases - 4 weeks			120	120	ZO	4
Pediatrics - 2 weeks			60	60	ZO	2
Surgery - 2 weeks			60	60	ZO	2
Gynecology and obstetrics - 2 weeks			60	60	ZO	2
Intensive therapy - 2 weeks			60	60	ZO	2
			∑ 600	∑ 600		∑ 20
Total:			**5849**	**5849**		**364**

* Electives– the list of elective subjects is presented to students each year by May 31st, before the start of the academic year in which the elective course is to be taken.

The study program includes a description of the course sequence, the rules for selecting elective subjects, and the principles for completing the education tracks. The medical program lasts for 12 semesters. During the first 4 semesters, subjects from the basic and preclinical sciences are taught, followed by 6 semesters mainly focused on clinical subjects, both procedural and non-procedural. In the final year, the education is practical and aimed at professional training. The list of elective subjects available for selection is regularly provided to students before the start of the next academic year. Students of full-time, part-time, and the English Division follow the same study schedule.

President of the Senate
of the University of Rzeszów

Prof. Sylwester Czopek, PhD Rector