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Senatu UJ z dnia 24 czerwca 2020 r.

UNIWERSYTET JAGIELLOŃSKI
COLLEGIUM MEDICUM

Program studiów

Wydział:	Wydział Lekarski
Kierunek:	Medical Program
Poziom kształcenia:	jednolite magisterskie
Forma kształcenia:	stacjonarne
Rok akademicki:	2020/21

Spis treści

Charakterystyka kierunku

Informacje podstawowe

Nazwa wydziału:	Wydział Lekarski
Nazwa kierunku:	Medical Program
Poziom:	jednolite magisterskie
Profil:	ogólnoakademicki
Forma:	stacjonarne
Język studiów:	angielski

Przyporządkowanie kierunku do dziedzin oraz dyscyplin, do których odnoszą się efekty uczenia się

Nauki medyczne	**100,0%**

Charakterystyka kierunku, koncepcja i cele kształcenia

Charakterystyka kierunku

The Medical Program at the Faculty of Medicine of the Jagiellonian University Medical College is a dynamic, modern and significant program on the European map of medical universities, boasting excellent scientific and didactic staff consisting of 150 full professors and doctors with habilitation degrees, and over 450 doctors who, drawing on the wealth of centuries-old tradition, set new directions of thought development through the highest quality scientific research and teaching.
Every year over 400 doctors graduate from the Faculty of Medicine, and every year the Faculty of Medicine of the JU MC enjoys great interest among candidates for medical universities.
The current shape of medical studies is the result of many years of experience in professional education of medical staff in the care of human health and life.
Students have a rich, well-equipped scientific and didactic base, highly qualified scientific and didactic staff, specialist clinical base, and modern scientific and research infrastructure at their disposal.
Medical studies are uniform master's studies lasting 12 semesters. The curriculum of the first three years of studies includes teaching in the field of theoretical disciplines of medical sciences, i.e. normal anatomy, biology with embryology, histology with cytophysiology, general and organic chemistry, biochemistry, physiology, biophysics, microbiology, immunology, genetics, pathomorphology, pathophysiology, pharmacology. From the first year of their studies, they are familiarized with the rules of ethics and learn about relations and communication with patients. During the first, second and third year of studies, students are also taught the basics of clinical sciences in the form of first aid and elements of nursing, propedeutics of medicine, pediatrics and internal diseases, as well as epidemiology, history of medicine, history of philosophy, sociology of medicine, medical ethics, health psychology, computer science with biometrics, and two foreign languages. From the fourth to the sixth year of studies, basic clinical disciplines are taught, i.e. pediatrics with aediatric surgery, internal diseases, surgery, orthopedics and traumatology, gynecology and obstetrics, ophthalmology, infectious diseases, psychiatry, neurology with neurosurgery, laryngology, as well as hygiene, radiology, clinical and environmental toxicology, emergency medicine, public health, nuclear medicine, occupational medicine and diseases, immunology and microbiology. The studies also include a program of numerous optional courses in neurology, medical cytobiology, molecular epidemiology, psychoanalysis, and clinical disciplines expanding the mandatory knowledge in cardiology, anesthesiology and intensive care, palliative care, surgery, emergency medicine and methodology of medical research. In order to pass the individual

years of studies, it is necessary to complete program practices in the field of patient care, internal diseases, pediatrics, gynecology, general surgery, emergency aid and out-patient health care (family physician). Graduates of the medical faculty receive a diploma and a professional title of medical doctor (Polish: lekarz).

Koncepcja kształcenia

The aim of medical studies is to teach the fundamental theories and principles of medical practice, to transfer the skills of communication and cooperation with patients, colleagues and other medical professionals, and to prepare to lead human teams. The studies should provide the graduate with the necessary knowledge and skills, as well as ethical principles ensuring professional and safe medical care.
In accordance with the current teaching standards, the graduate has theoretical and practical skills in prevention and treatment necessary to practice the profession of a medical doctor.
In terms of knowledge, the graduate knows and understands the development, structure and functions of the human body in normal and pathological conditions, can recognize the symptoms and course of diseases, knows the methods of diagnostic and therapeutic management appropriate for specific conditions, and also understands the ethical, social and legal conditions of the medical profession and the principles of health promotion, and his/her knowledge is based on scientific evidence and accepted norms, and is also familiarized with methods of conducting scientific research.
In terms of skills, graduates are able to recognize medical problems and priorities in the field of medical management, recognize life-threatening conditions requiring immediate medical intervention, plan diagnostic procedures and interpret their results, as well as implement appropriate and safe therapeutic management and predict its effects. Graduates also know how to plan their own educational activity and constantly improve their education in order to update their knowledge and inspire the learning process of others. Preparation for the medical profession also includes communicating with patients and their families in an atmosphere of trust, taking into account patients' needs, communicating with colleagues in a team, and sharing knowledge, as well as critically evaluating the results of scientific research with appropriate justification of a position.
In terms of social competences, graduates are ready to establish and maintain deep and respectful contact with patients, as well as to show understanding for differences in world-related outlooks and cultures. The main principle for a graduate is to be guided by the well-being of a patient and to respect the medical confidentiality and rights of a patient. Further competences include the ability to take action against patients on the basis of norms and ethical principles with an awareness of social determinants and limitations resulting from the disease, and the ability to see and recognize one's own limitations and to self-assess educational deficits and needs. Graduates are prepared to promote health-promoting behaviors, are taught to use objective sources of information and formulate conclusions from their own measurements or observations. In terms of team work, a student is taught to implement the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, including in a multicultural and multinational environment. Graduate is competent to formulate opinions on various aspects of professional activity and has an educated ability to take responsibility for decisions taken in the course of professional activity, including in terms of their own and other people's safety.

Cele kształcenia

1. acquiring the ability to plan and implement preventive, diagnostic and therapeutic procedures on a scientific basis which respects the principles of humanity
2. acquiring the ability to critically assess research results
3. ability to conduct scientific research and to spread their results
4. preparation for cooperation with other health care providers
5. preparation for managing human teams
6. readiness to continue professional education
7. readiness to continue education in doctoral schools and to participate in medical research

Potrzeby społeczno-gospodarcze

Wskazanie potrzeb społeczno-gospodarczych utworzenia kierunku

The statistics of the The Polish Chamber of Physicians and Dentists show that in Poland there is a great need for reliable doctors who are capable of offering appropriate preventive, diagnostic and therapeutic methods, based on solid theoretical foundations and the results of the latest research, adapted to the needs of individuals and groups of people. The need for education in a medical field is therefore one of the most urgent needs in the current medical situation in the country.

Wskazanie zgodności efektów uczenia się z potrzebami społeczno-gospodarczymi

Thanks to the implementation of the assumed learning outcomes, graduates of medical studies, in accordance with their knowledge and skills acquired during their studies, are prepared to work in: public and non-public health care institutions; education; research institutions and research and development centers; institutions dealing with counseling and dissemination of knowledge in the field of health-promoting education, which is the answer to the increase in demand for medical services caused by demographic and civilization trends.

Nauka, badania, infrastruktura

Główne kierunki badań naukowych w jednostce

The academic staff at the Faculy of Medicine, which conducts classes in the field of medicine, participates in the implementation of a number of scientific research and scientific and implementation works in the field of medical and health sciences. Over the last 5 years, the research teams at the Faculty of Medicine participated in the implementation of over 300 projects financed from the National Science Centre, The National Centre for Research and Development, The Ministry of Health, The Ministry of Science
and Higher Education, international funds (including other EU programs) and several hundred projects from the university's own funds. The employees of the Faculty of Medicine implement projects in the scope of searching for new pathomechanisms and possibilities of personalized diagnosis and therapy of modern-age diseases (e.g. of the cardiovascular system, malignant tumors, diabetes, obesity, neurological and mental diseases, digestive system diseases, diseases related to the aging of society), interdisciplinary issues (e.g. cardiometabolic, cardiooncological, neuroendocrine problems), reproductive health problems and developmental age medicine, and therapeutic applications of regenerative medicine (e.g. the use of stem cells in the treatment of serious diseases). All units involved in the implementation of the program in the medical field, both in pre-clinical sciences and in clinical subjects, conduct scientific research.

Związek badań naukowych z dydaktyką

The majority of the employees of the Faculty of Medicine combine teaching with scientific work. The knowledge, skills and experience gained by academic teachers as a result of their research and development work are used in the educational process as a basis for modification and modernization of educational content, both in pre-clinical and clinical subjects. There are more than 100 student scientific clubs at the Faculty, at the pre-clinical and clinical units. The students who work there supplement their medical knowledge and learn the methodology of scientific work. The results of their work are presented every year at numerous international scientific conferences. Student scientific circles operating at the Department of Medical Didactics participate in research aimed at the optimization of the education process at the Faculty of Medicine. Doctoral students are involved in the implementation of most of the scientific projects of the Faculty's researchers, while students participate in a large number of projects. Doctoral students may apply for funds for research in the JUMC competition, whereas students may apply for Student Grants. Every year, several "diamond grants" financed by the Ministry of Science and Higher Education are held at the Faculty of Medicine.

Opis infrastruktury niezbędnej do prowadzenia kształcenia

The teaching infrastructure used for the implementation of the medical curriculum is based on three main components: lecture halls (17 in total), seminar and training rooms (over 130 available, in particular organizational units conducting teaching classes), and the hospital (and laboratory) base of the University Hospital in Kraków, the University Children's Hospital in Kraków, as well as units cooperating with the Faculty. These units constitute both the didactic and scientific base of the Faculty, being the seats of appropriate Departments, Clinics and Departments. Lecture halls are equipped with appropriate equipment, i.e. multimedia projectors, computers. Students have access to the resources of the Medical Library and the resources of the Jagiellonian Library. Equipment and infrastructure are constantly updated, supplemented and developed in accordance with the demand resulting from the implementation of the education program. In 2019, a new seat of the University Hospital in Kraków-Prokocim opened, with a teaching base of 51 seminar rooms and a lecture hall, as well as a system of comprehensive sound and image transmission between all operating, endoscopic, imaging diagnostics and teaching rooms. In 2020, the construction of the Centre for Innovative Medical Education (CIEM), located in the immediate vicinity of the new University Hospital headquarters, was completed, including 10 high-fidelity simulation rooms, rooms for technical skills improvement, a laboratory for teaching of clinical skills, low-fidelity simulation rooms and rooms for Objective Structured Clinical Examinations (OSCE).

Program

Podstawowe informacje

Klasyfikacja ISCED:	0912
Liczba semestrów:	12
Tytuł zawodowy nadawany absolwentom:	lekarz

Opis realizacji programu:

The curriculum of studies at the Faculty of Medicine is based on the didactic and research facilities of the Faculty of Medicine of the Jagiellonian University Medical College in cooperation with external entities, thanks to which it is possible to train practical skills of students in various conditions and environments, which prepares them for later employment in the medical profession. The education program is primarily aimed at developing practical/clinical skills based on a reliable theoretical base and gained experience with patients. All students follow the same program.

Liczba punktów ECTS

konieczna do ukończenia studiów	365
w ramach zajęć prowadzonych z bezpośrednim udziałem nauczycieli akademickich lub innych osób prowadzących zajęcia	216
którą student musi uzyskać w ramach zajęć z zakresu nauki języków obcych	18
którą student musi uzyskać w ramach modułów realizowanych w formie fakultatywnej	11
którą student musi uzyskać w ramach praktyk zawodowych	20
którą student musi uzyskać w ramach zajęć z dziedziny nauk humanistycznych lub nauk społecznych	8

Liczba godzin zajęć

Łączna liczba godzin zajęć: 5999

Praktyki zawodowe

Wymiar, zasady i forma odbywania praktyk zawodowych

As part of the medical studies program, students are required to complete work experience in the amount of 600 teaching hours, which corresponds to 20 ECTS credits. Internships are carried out during the summer holidays (July-August) between the first and fifth year of studies, in hospitals in the country and abroad. They take place in the area of patient care, internal diseases, pediatrics, gynecology, general surgery, emergency care and out-patient health care (family physician). All apprenticeships are supervised by the internship coordinators.

Ukończenie studiów

Wymogi związane z ukończeniem studiów (praca dyplomowa/egzamin dyplomowy/inne)

The condition for graduation from the Medical Faculty of the Jagiellonian University Medical College is to obtain credit for all subjects and practical training required by the study plan. In accordance with the current teaching standards, the graduate has theoretical and practical skills in prevention and treatment necessary to practice the profession of a medical doctor.

Efekty uczenia się

Wiedza

Ogólne

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
O.W1	development, structure and functions of the human body in normal and pathological conditions	P7U_W, P7S_WG
O.W2	symptoms and course of diseases	P7U_W, P7S_WG
O.W3	methods of diagnostic and therapeutic procedures appropriate for specific disease states	P7U_W, P7S_WG
O.W4	ethical, social and legal conditions for practicing the medical profession and the principles of health promotion, based on scientific evidence and accepted standards	P7U_W, P7S_WG
O.W5	methods of conducting scientific research	P7U_W, P7S_WG

Szczegółowe

A. Morphological education

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
A.W1	anatomical, histological and embryological denominations in Polish and English	P7U_W, P7S_WG
A.W2	structure of human body in topographic (upper and lower extremities, thorax, abdomen, pelvis, back, neck, head) and functional (osteoarticular system, muscular system, circulatory system, respiratory system, digestive system, urinary system, genital system, nervous system and sensory organs, integuments) approaches	P7U_W, P7S_WG
A.W3	topographical relations between individual organs	P7U_W, P7S_WG
A.W4	basic cellular structures and their functional specializations	P7U_W, P7S_WG
A.W5	microarchitecture of tissues, extracellular matrix and organs	P7U_W, P7S_WG
A.W6	stages of development of the human embryo, the structure and function of the membranes and placenta, stages of development of individual organs and the influence of harmful factors on the development of the embryo and fetus (teratogenic)	P7U_W, P7S_WG

B. Scientific basics of medicine

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
B.W1	water and electrolyte management in biological systems	P7U_W, P7S_WG
B.W2	acid-base balance and buffer mechanism, and their importance in systemic homeostasis	P7U_W, P7S_WG
B.W3	terms: solubility, osmotic pressure, isotonia, colloidal solutions and Gibbs-Donnan equilibrium	P7U_W, P7S_WG

Kod	Treść	PRK
B.W4	basic reactions of inorganic and organic compounds in aqueous solutions	P7U_W, P7S_WG
B.W5	physical laws describing fluid flow and factors affecting vascular resistance to blood flow	P7U_W, P7S_WG
B.W6	natural and artificial sources of ionising radiation and their interaction with matter	P7U_W, P7S_WG
B.W7	physicochemical and molecular basis of sensory organs activity	P7U_W, P7S_WG
B.W8	the physical basis of non-invasive imaging methods	P7U_W, P7S_WG
B.W9	physical fundamentals of selected therapeutic techniques, including ultrasound and irradiation	P7U_W, P7S_WG
B.W10	structure of simple organic compounds included in macromolecules present in cells, extracellular matrix and body fluids	P7U_W, P7S_WG
B.W11	structure of lipids and polysaccharides and their functions in cellular and extracellular structures	P7U_W, P7S_WG
B.W12	primary, secondary, tertiary and quaternary structure of proteins, as well as post-translational and functional modifications of proteins and their importance	P7U_W, P7S_WG
B.W13	nucleotide functions in the cell, primary and secondary DNA and RNA structures and chromatin structure	P7U_W, P7S_WG
B.W14	functions of the genome, transcriptome and human proteome, and basic methods used in their examination, processes of DNA replication, repair and recombination, transcription and translation and degradation of DNA, RNA and proteins, as well as concepts for regulation of gene expression	P7U_W, P7S_WG
B.W15	basic catabolic and anabolic pathways, ways of regulating them, and the influence of genetic and environmental factors on them	P7U_W, P7S_WG
B.W16	metabolic profiles of basic organs and systems	P7U_W, P7S_WG
B.W17	methods of intercellular communication, as well as between the cell and the extracellular matrix, and signal pathways in the cell, and examples of disorders in these processes leading to the development of cancer and other diseases	P7U_W, P7S_WG
B.W18	processes: cell cycle, cell proliferation, differentiation and aging, apoptosis and necrosis and their importance for the functioning of the body	P7U_W, P7S_WG
B.W19	in the basic scope, the subject matter of stem cells and their application in medicine	P7U_W, P7S_WG
B.W20	basics of induction and transmission in the nervous system and higher nervous actions as well as physiology of striated and smooth muscles and blood functions	P7U_W, P7S_WG
B.W21	activity and mechanisms of regulation of all organs and systems of the human body, including the cardiovascular system, respiratory system, digestive system, urinary tract and skin layers, and the interrelations existing between them	P7U_W, P7S_WG
B.W22	the course and regulation of reproductive functions in women and men	P7U_W, P7S_WG
B.W23	the mechanism of the body's aging	P7U_W, P7S_WG
B.W24	basic quantitative parameters describing the capacity of particular systems and organs, including the range of norms and demographic factors influencing the value of these parameters	P7U_W, P7S_WG
B.W25	the relationship between factors disturbing the balance of biological processes and physiological and pathophysiological changes	P7U_W, P7S_WG
B.W26	basic IT and biostatistical tools used in medicine, including medical databases, spreadsheets and computer graphics basics	P7U_W, P7S_WG
B.W27	basic methods of statistical analysis used in population and diagnostic studies	P7U_W, P7S_WG
B.W28	the possibilities of modern telemedicine as a tool to support the work of a doctor	P7U_W, P7S_WG

Kod	Treść	PRK
B.W29	principles of conducting scientific, observational and experimental studies and in vitro studies for the development of medicine	P7U_W, P7S_WG
B.W30	basic laws describing electrical and magnetic phenomena in the body	P7U_W, P7S_WG
B.W31	basic laws of mechanics referring to the skeletal and muscular system	P7U_W, P7S_WG
B.W32	biochemical fundamentals of xenobiotic metabolic processes	P7U_W, P7S_WG
B.W33	pathomechanisms of regulation disorders of all organs and systems of the human body, including: circulatory, respiratory, urinary and digestive systems, nervous system (central, peripheral and autonomous)	P7U_W, P7S_WG
B.W34	the principles for assessing the power and credibility of the recommendations in the guidelines for action	P7U_W, P7S_WG
B.W35	the types of observational and interventional studies and the rules governing their conduct	P7U_W, P7S_WG
B.W36	on-line data presentation techniques	P7S_WK
B.W37	rules of using materials published on the Internet (copyright, quoting law, methods of obtaining free materials)	P7U_W, P7S_WG
B.W38	the means of secure Internet communication	P7S_WK
B.W39	computer-aided decision support for medical decisions with particular emphasis on clinical pathway techniques	P7U_W, P7S_WG
B.W40	basic techniques of representation of medical knowledge for intelligent computer systems in medicine	P7U_W, P7S_WG
B.W41	concepts related to on-line data transmission	P7S_WK
B.W42	elements of the hospital patient service system	P7S_WK
B.W43	selected online sources of medical information, with particular emphasis on genetic diseases, available on the Internet	P7S_WK
B.W44	principles of operation and organisation of teleconferences	P7S_WK
B.W45	types of IT tools supporting the process of remote lifelong learning with particular emphasis on simulators available on-line	P7S_WK
B.W46	the opportunities and limitations offered by new information technology simulation techniques on examples of selected European research projects	P7S_WK
B.W47	the types of data used in electronic medical records	P7S_WK
B.W48	principles for the development of databases for patient care and research	P7S_WK
B.W49	principles for the operation and use of electronic patient records	P7U_W, P7S_WG
B.W50	principles of proper nutrition of a healthy and sick person and methods of assessing the state of nutrition	P7U_W, P7S_WG

C. Preclinical course

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
C.W1	basic concepts in the field of genetics	P7U_W, P7S_WG
C.W2	phenomena of gene coupling and interaction	P7U_W, P7S_WG
C.W3	normal human karyotype and different types of sex determination	P7U_W, P7S_WG

Kod	Treść	PRK
C.W4	chromosome structure and molecular mutagenic background	P7U_W, P7S_WG
C.W5	the rules for the inheritance of different numbers of traits, the inheritance of quantitative traits, the independent inheritance of traits and the inheritance of non-nuclear genetic information	P7U_W, P7S_WG
C.W6	genetic determinants of human blood groups and serological conflict in the Rh system	P7U_W, P7S_WG
C.W7	aberrations of autosomes and heterosomes that cause disease, including oncogenesis and cancer	P7U_W, P7S_WG
C.W8	factors influencing the primary and secondary genetic balance of the population	P7U_W, P7S_WG
C.W9	basics of diagnostics of gene and chromosomal mutations responsible for hereditary and acquired diseases, including neoplastic diseases	P7U_W, P7S_WG
C.W10	benefits and threats resulting from the presence of genetically modified organisms (GMOs) in the ecosystem	P7U_W, P7S_WG
C.W11	genetic mechanisms for the acquisition of drug resistance by microorganisms and cancer cells	P7U_W, P7S_WG
C.W12	micro-organisms, including pathogenic and present in the physiological flora	P7U_W, P7S_WG
C.W13	epidemiology of viral and bacterial infections and infections with fungi and parasites, taking into account their geographical distribution	P7U_W, P7S_WG
C.W14	the impact of abiotic and biotic (viruses, bacteria) environmental factors on the human body and human population and their pathways into the human body	P7S_WK
C.W15	the consequences of human body exposure to various chemical and biological agents and the principles of prevention	P7U_W, P7S_WG
C.W16	human-invasive forms or stages of parasitic fungi, protozoa, helminths and arthropods of selected parasitic species, taking into account their geographical distribution	P7U_W, P7S_WG
C.W17	the principle of the parasite-host system and the principal disease symptoms caused by the parasites	P7U_W, P7S_WG
C.W18	symptoms of iatrogenic infections, their pathways and pathogens causing changes in individual organs	P7U_W, P7S_WG
C.W19	basics of microbiological and parasitological diagnostics basics of disinfection, sterilization and aseptic management	P7U_W, P7S_WG
C.W20	basic principles of disinfection, sterilization and aseptic management	P7U_W, P7S_WG
C.W21	basic of development and mechanisms of immune system action, including specific and non-specific mechanisms of humoral and cellular immunity	P7U_W, P7S_WG
C.W22	major histocompatibility complex	P7U_W, P7S_WG
C.W23	types of hypersensitivity reactions, types of immunodeficiency and basicss of immunomodulation	P7U_W, P7S_WG
C.W24	issues related to cancer immunology	P7U_W, P7S_WG
C.W25	the genetic basis for donor and recipient selection and the basics for transplantation immunology	P7U_W, P7S_WG
C.W26	pathomorphological nomenclature	P7U_W, P7S_WG
C.W27	basic mechanisms of cell and tissue damage	P7U_W, P7S_WG
C.W28	clinical course of specific and non-specific inflammations, as well as tissue and organ regeneration processes	P7U_W, P7S_WG

Kod	Treść	PRK
C.W29	definition and pathophysiology of shock, with particular emphasis on differentiation of the causes of shock and multi-organ failure	P7U_W, P7S_WG
C.W30	aetiology of haemodynamic disorders, regressive and progressive changes	P7U_W, P7S_WG
C.W31	issues related to detailed pathology of organs, macro- and microscopic images and clinical course of pathomorphological changes in particular organs	P7U_W, P7S_WG
C.W32	consequences of developing pathological changes for topographically adjacent organs	P7U_W, P7S_WG
C.W33	external and internal pathogens, both modifiable and non-modifiable	P7U_W, P7S_WG
C.W34	clinical forms of the most frequent diseases of particular systems and organs, metabolic diseases and disorders of water-electrolyte, hormonal and acid-base metabolism	P7U_W, P7S_WG
C.W35	individual groups of therapeutic agents	P7U_W, P7S_WG
C.W36	the main mechanisms of drug action, and their changes in the system depending on age	P7U_W, P7S_WG
C.W37	the influence of disease processes on the metabolism and elimination of medicines	P7U_W, P7S_WG
C.W38	basic rules of pharmacotherapy	P7U_W, P7S_WG
C.W39	more important side effects of medicines, including those resulting from their interaction	P7U_W, P7S_WG
C.W40	the problem of drug resistance, including multi-drug drug resistance	P7U_W, P7S_WG
C.W41	indications for genetic tests performed with the aim of individualizing pharmacotherapy	P7U_W, P7S_WG
C.W42	basic directions of therapy development, in particular the possibilities of cellular, gene and targeted therapy in specific diseases	P7U_W, P7S_WG
C.W43	basic concepts of general toxicology	P7U_W, P7S_WG
C.W44	groups of medicines, the abuse of which can lead to poisoning	P7U_W, P7S_WG
C.W45	symptoms of the most common acute poisoning, including alcohol, drugs and other psychoactive substances, heavy metals and selected groups of drugs	P7U_W, P7S_WG
C.W46	basic principles of diagnostic procedures in poisoning	P7U_W, P7S_WG
C.W47	influence of oxidative stress on cells and its importance in the pathogenesis of diseases and aging processes	P7U_W, P7S_WG
C.W48	the consequences of vitamin or mineral deficiencies and their excess in the body	P7U_W, P7S_WG
C.W49	enzymes involved in digestion, the mechanism of hydrochloric acid production in the stomach, the role of bile, the course of absorption of digestive products	P7U_W, P7S_WG
C.W50	the consequences of inadequate nutrition, including prolonged hunger, excessive food intake and unbalanced diet, and disorders of digestion and absorption of digestive products	P7U_W, P7S_WG
C.W51	the mechanism of hormone actions	P7U_W, P7S_WG
C.W52	morphological changes in the most important non-cancer diseases affecting the entire organism (e.g. atherosclerosis, hypertension, diabetes, cardiopulmonary insufficiency, systemic infectious and immunological diseases, the most frequent hormonal disorders, the most frequent genetic diseases), and is able to link them with already acquired knowledge of anatomy, biochemistry and pathological physiology in order to deduce clinical symptoms	P7U_W, P7S_WG

Kod	Treść	PRK
C.W53	pre-cancerous and high-risk conditions related to cancer, neoplastic transformation processes with their morphological signs, principles of cancer classification according to WHO, the most important risk factors, prognostic and predictive, and methods of histopathological and cytological testing and supporting molecular tests used in cancer diagnosis, detection and monitoring pre-cancerous conditions, and also understands the importance of proper diagnosis of histopathology cancer for proper treatment	P7U_W, P7S_WG
C.W54	pathogenesis and morphological changes of diseases associated with advanced age, including those particularly important in an aging society, the most frequent neurodegenerative diseases (e.g. Alzheimer's disease)	P7U_W, P7S_WG
C.W55	morphological changes, and understands the pathogenesis of critical pathological conditions brain such as swelling, ischemia, hemorrhages, effects of exogenous substances (e.g. alcohol, CO) and mechanical injury	P7U_W, P7S_WG
C.W56	morphological changes in the most common pathologies of the pediatric period, including in particular perinatal pathologies and genetic diseases and developmental disorders (defects) in children, and is able to link them with teratogenic, genetic factors and perinatal trauma	P7U_W, P7S_WG
C.W57	the importance of post-mortem examination as an examination verifying the diagnosis and important for improving the quality of hospital work and for the self-education of a doctor, and this knowledge is supported by direct, i.e. personal active participation in autopsy	P7U_W, P7S_WG
C.W58	the subject of basic (including histochemistry and immunohistochemistry) techniques used in pathomorphological diagnostics and selected molecular techniques (FISH, etc.), and understands their determinants related to the protection of material, and knows the rules of evaluation and interpretation of macro- and microscopic material to be examined	P7U_W, P7S_WG

D. Behavioral and social sciences with elements of professionalism

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
D.W1	the social dimension of health and disease, the impact of the social environment (family, social networks) and social inequalities and socio-cultural differences on health, and the role of social stress in health and self-destructive behaviors	P7U_W, P7S_WG
D.W2	social factors influencing behaviour in health and disease, particularly in chronic disease	P7U_W, P7S_WG
D.W3	forms of violence, models explaining domestic and institutional violence, the social determinants of the various forms of violence and the role of the doctor in recognizing it	P7U_W, P7S_WG
D.W4	social attitudes towards the importance of health, disease, disability and old age, the social consequences of disease and disability and social and cultural barriers, and the concept of quality of life as determined by the state of health	P7U_W, P7S_WG
D.W5	principles and methods of communication with the patient and his/her family, which are aimed at building empathic, trust-based relationships	P7U_W, P7S_WG
D.W6	the importance of verbal and non-verbal communication in the process of communicating with the patient and the notion of trust in the interaction with the patient	P7U_W, P7S_WG
D.W7	psychosocial consequences of hospitalization and chronic disease	P7U_W, P7S_WG
D.W8	functioning of health care system entities and social role of a physician	P7U_W, P7S_WG
D.W9	basic psychological mechanisms of human functioning in health and disease	P7U_W, P7S_WG

Kod	Treść	PRK
D.W10	the role of the patient's family in the treatment process	P7S_WK
D.W11	issues related to the adaptation of patients and their families to disease as a difficult situation and to related events, including dying and family mourning processes	P7S_WK
D.W12	the role of stress in etiopathogenesis and disease progression, and the mechanisms for coping with stress	P7U_W, P7S_WG
D.W13	mechanisms, objectives and treatment options for psychoactive substance dependence	P7U_W, P7S_WG
D.W14	the principles of health promotion, its tasks and main lines of action, with particular reference to the role of elements of a healthy lifestyle	P7S_WK
D.W15	principles of motivating the patient to health-promoting behaviors and informing about unsuccessful prognosis	P7U_W, P7S_WG
D.W16	the main concepts, theories, principles and ethical rules serving as a general framework for the proper interpretation and analysis of moral and medical issues	P7S_WK
D.W17	patient's rights	P7S_WK
D.W18	principles of teamwork	P7S_WK
D.W19	cultural, ethnic and national determinants of human behavior	P7U_W, P7S_WG
D.W20	the history of medicine, the medicine of primitive peoples and ancient civilizations and the characteristic features of medieval medicine	P7S_WK
D.W21	the characteristics of modern medicine and its most important discoveries	P7S_WK
D.W22	the process of shaping new specialties in the field of scientific discipline - medical sciences and achievements of leading representatives of Polish and world medicine	P7U_W, P7S_WK
D.W23	basics of evidence-based medicine	P7S_WK
D.W24	standards relating to patients' rights	P7S_WK

E. Clinical non-procedural medical disciplines

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
E.W1	environmental and epidemiological determinants of the most frequent diseases	P7U_W, P7S_WG
E.W2	the principles of nutrition of healthy and sick children, including breastfeeding, preventive vaccination and child health monitoring	P7U_W, P7S_WG

Kod	Treść	PRK
E.W3	the causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases of children: (1) rickets, tetanus, convulsions, (2) heart defects, myocarditis, endocarditis, pericarditis, cardiomyopathy, arrhythmia, heart failure, hypertension, syncope, (3) acute and chronic diseases of the upper and lower airways, congenital defects of the respiratory system, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema, (4) anemia, hemorrhagic diatheses, conditions of bone marrow failure, pediatric neoplastic diseases, including solid tumors typical of childhood, (5) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal bleeding, peptic ulcer disease, non-specific intestinal diseases, pancreatic diseases, cholestasis and liver diseases, and other acquired diseases and congenital defects of the digestive tract, (6) urinary tract infections, congenital anomalies of the urinary system, nephrotic syndrome, renal stones, acute and chronic renal failure, acute and chronic nephritis, systemic kidney diseases, urinary tract disorders, vesicoureteral reflux disease, (7) growing disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, disorders of puberty and gonadal functions, (8) cerebral palsy, encephalomyelitis, meningitis, epilepsy, (9) the most common infectious diseases of childhood, (10) genetic syndromes, (11) diseases of connective tissue, rheumatic fever, juvenile arthritis, systemic lupus, dermatomyositis	P7U_W, P7S_WG
E.W4	issues of abused child and sexual abuse, mental retardation and behavioral disorders – psychoses, addictions, eating disorders and excretion in children	P7U_W, P7S_WG
E.W5	basic methods of fetal diagnostics and therapy	P7U_W, P7S_WG
E.W6	the most common life-threatening conditions in children and the rules of conduct in these conditions	P7U_W, P7S_WG
E.W7	the causes, symptoms, principles of diagnosis and therapeutic management of the most common internal diseases and their complications in adults: 1) cardiovascular diseases, including ischemic heart disease, heart defects, endocarditis, myocardial infarction, pericardial infarction, heart failure (acute and chronic), diseases of arteries and venous vessels, arterial hypertension - primary and secondary, pulmonary hypertension, 2) respiratory system diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchial dilatation, cystic fibrosis, respiratory infections, interstitial diseases of the lungs, pleura, mediastinum, obstructive and central sleep apnea, respiratory failure (acute and chronic), respiratory tumors, 3) diseases of the digestive system, including diseases of the mouth, esophagus, stomach and duodenum, intestines, pancreas, liver, bile ducts and gallbladder, 4) diseases of the internal secretion system, including diseases of the hypothalamus and pituitary gland, thyroidism, parathyroidism, adrenal cortex and medulla, ovaries and testicles, and neuroendocrine tumors, polyglandular syndromes, various types of diabetes and metabolic syndrome – hypoglycaemia, obesity, dyslipidemia, 5) diseases of the kidneys and the urinary tract, including acute and chronic renal failure, glomerulonephrine and interstitial kidney diseases, kidney cysts, kidney stones, urinary tract infections, urinary tract neoplasms, in particular of bladder and kidney neoplasms, 6) hematopoietic diseases, including bone marrow aplasia, anemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute leukemia, myeloproliferative and myelodysplastic-myeloproliferative tumours, myelodysplastic syndromes, mature B and T lymphocytes tumors, bleeding diatheses, thrombophilia, life-threatening conditions in hematology, blood disorders in other organ diseases, 7) rheumatic diseases, including systemic connective tissue diseases, systemic vasculitis, joint inflammations involving spinal cord, metabolic bone diseases, osteoporosis and osteoarthritis in particular, gout, 8) allergic diseases, including anaphylaxis and anaphylactic shock and angioedema, 9) water-electrolyte and acid-base disorders: dehydration conditions, overhydration conditions, electrolyte, acidic and alkaline disorders	P7U_W, P7S_WG
E.W8	course and symptoms of the aging process and the principles of the overall geriatric assessment and interdisciplinary care for an elderly patient	P7U_W, P7S_WG
E.W9	the causes and basic differences in the most common diseases in the elderly and the principles of management in basic geriatric syndromes	P7U_W, P7S_WG

Kod	Treść	PRK
E.W10	the basic principles of pharmacotherapy for diseases in the elderly	P7U_W, P7S_WG
E.W11	dangers associated with the hospitalisation of the elderly	P7U_W, P7S_WG
E.W12	basic principles of organizing care for the elderly and the burden on the carer of the elderly	P7U_W, P7S_WG
E.W13	basic neurological symptom syndromes	P7U_W, P7S_WG
E.W14	causes, symptoms, principles of diagnosis and therapeutic management in the most common diseases of the nervous system, including: 1) headaches: migraines, tension headaches and headache syndromes and neuralgia of the nerve V, 2) cerebral vascular diseases, in particular stroke, 3) epilepsy, 4) infections of the nervous system, in particular meningitis, borreliosis, herpetic encephalitis, neurotransmission diseases, 5) dementia, in particular: Alzheimer's disease, frontal dementia, vascular dementia and other dementia syndromes, 6) basal ganglia diseases, Parkinson's disease in particular, 7) demyelinating diseases, multiple sclerosis in particular, 8) diseases of the neuromuscular system, lateral atrophic sclerosis and sciatic neuralgia in particular, 9) craniocerebral injuries, cerebral palsy in particular	P7U_W, P7S_WG
E.W15	basic concepts of the pathogenesis of mental disorders	P7U_W, P7S_WG
E.W16	the general symptomatology of mental disorders and the rules for classifying them according to the main classification systems	P7U_W, P7S_WG
E.W17	symptoms, principles of diagnosis and therapeutic management in the most frequent mental disorders, including 1) schizophrenia, 2) affective disorders, 3) neurotic and adaptive disorders, 4) nutritional disorders, 5) disturbances related to the intake of psychoactive substances, 6) sleep disorders	P7U_W, P7S_WG
E.W18	principles of diagnostics and emergency management in psychiatry, including suicide issues	P7U_W, P7S_WG
E.W19	the specificity of mental disorders and their treatment in children, adolescents and in old age	P7U_W, P7S_WG
E.W20	symptoms of mental disorders in the course of somatic diseases, their influence on the course of the basic disease and prognosis and the principles of their treatment	P7U_W, P7S_WG
E.W21	the problem of human sexuality and fundamental disorders associated with it	P7U_W, P7S_WG
E.W22	rules on the protection of mental health, with particular reference to the rules on admission to a mental hospital	P7U_W, P7S_WK
E.W23	environmental and epidemiological determinants of the most frequent human neoplastic diseases	P7U_W, P7S_WG
E.W24	basics of early detection of neoplastic diseases and principles of screening in oncology	P7U_W, P7S_WG
E.W25	possibilities of modern neoplastic therapy, including multimodal therapy, perspectives of cellular and gene therapies and their adverse effects	P7U_W, P7S_WG
E.W26	principles of combination therapies in oncology, algorithms of diagnostic and therapeutic procedures in the most common human cancers	P7U_W, P7S_WG
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) cachexia management and the prevention and treatment of bedsores, 3) the most common emergencies in palliative medicine	P7U_W, P7S_WG
E.W28	principles for palliative treatment of terminal patient	P7U_W, P7S_WG
E.W29	principles for the treatment of pain, including cancer and chronic pain	P7U_W, P7S_WG
E.W30	the concept of impairment and disability	P7U_W, P7S_WG
E.W31	the role of medical rehabilitation and methods used in it	P7U_W, P7S_WG

Kod	Treść	PRK
E.W32	basis rules of prevention, rules of conduct in the case of occupational exposure on dangerous and harmful factors	P7U_W, P7S_WG
E.W33	rules of conduct in the event of the detection of an infectious disease	P7U_W, P7S_WG
E.W34	causes, symptoms, principles of diagnosis, therapeutic and prophylactic management in the most common bacterial, viral, parasitic and fungal diseases, including pneumococcal infections, viral hepatitis, acquired immunodeficiency syndrome (AIDS), sepsis and hospital infections	P7U_W, P7S_WG
E.W35	basic features, environmental and epidemiological conditions of the most common human skin diseases	P7U_W, P7S_WG
E.W36	the causes, symptoms, principles of diagnosis and therapeutic management of the most common sexually transmitted diseases	P7U_W, P7S_WG
E.W37	the causes, symptoms, principles of diagnosis and therapeutic management of the most common hereditary diseases	P7U_W, P7S_WG
E.W38	causes, symptoms, principles of diagnosis and therapeutic management in the most common diseases and specific problems in the practice of a family physician	P7U_W, P7S_WG
E.W39	the types of biological materials to be used for laboratory diagnosis and the rules for the collection of test material	P7U_W, P7S_WG
E.W40	theoretical and practical basics of laboratory diagnostics	P7U_W, P7S_WG
E.W41	possibilities and limitations of laboratory tests in emergency situations	P7U_W, P7S_WG
E.W42	indications for the implementation of monitored therapy	P7U_W, P7S_WG
E.W43	basic pharmacoeconomic concepts	P7S_WK
E.W44	health effects of systematic physical activity of children and adolescents and physical activity of adults in prevention of selected diseases	P7U_W, P7S_WG
E.W45	the specificity of the study in sports medicine, including exercise capacity tests. Knows the rules of medical certification in children, adolescent and adult sportsmen	P7U_W, P7S_WG
E.W46	specific diseases related to physical activity and competitive sports, also in the sports of the disabled and in girls and women	P7U_W, P7S_WG
E.W47	principles of nutrition of physically active persons and athletes. Describes the difference between doping and support	P7U_W, P7S_WG
E.W48	epidemiological problems of infectious diseases in the world and in Poland	P7U_W, P7S_WG
E.W49	causes and symptoms a) HIV infection and acquired immune deficiency syndrome b) hepatotropic virus infections with HAV, HBV, HCV, HCV c) tick-borne diseases d) zoonoses e) anaerobic infections f) organ mycoses g) infectious diseases of childhood h) fever of unknown origin i) sepsis and septic shock j) infectious diseases of the central nervous system k) tetanus and botulism l) selected tropical diseases m) acute gastrointestinal infections n) influenza and SARS	P7U_W, P7S_WG
E.W50	Symptoms and rules for managing infectious diseases that are life-threatening	P7U_W, P7S_WG
E.W51	principles of immunoprophylaxis of infectious diseases	P7U_W, P7S_WG
E.W52	principles of diagnostics of infectious diseases and can interpret the results	P7U_W, P7S_WG
E.W53	basics of therapy of selected infectious diseases a) antibiotic therapy of selected bacterial infections b) use of antiretroviral drugs in HIV c) treatment of chronic hepatitis B and C d) the use of antiviral drugs in selected clinical situations	P7U_W, P7S_WG
E.W54	indications and rules for performing lumbar puncture and assisting in the performance of the procedure	P7U_W, P7S_WG
E.W55	the indications and rules for performing liver biopsy and assists in performing procedure	P7U_W, P7S_WG

Kod	Treść	PRK
E.W56	understands the symptoms, understands the etiology, treatment rules and is able to establish therapeutic contact with patients with the most common disorders: a) anxiety, somatic and other neurotic forms b) post-traumatic disorders c) personality and behavioral disorders of adults	P7U_W, P7S_WG
E.W57	principles of implementing psychotherapeutic dialog and types of therapeutic interventions	P7U_W, P7S_WG
E.W58	basic psychotherapeutic techniques and principles for combining psychotherapy and pharmacotherapy	P7U_W, P7S_WG

F. Clinical procedural sciences

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
F.W1	the causes, symptoms, diagnostic and therapeutic management principles for the most common diseases requiring surgical intervention, taking into account the distinctness of childhood age, including in particular: 1) acute and chronic abdominal diseases, 2) thoracic diseases, 3) diseases of extremities and head, 4) fractures of bones and injuries to organs	P7U_W, P7S_WG
F.W2	selected issues in the field of pediatric surgery, including traumatology and otorhinolaryngology, as well as acquired defects and diseases being indications for surgical treatment in children	P7U_W, P7S_WG
F.W3	rules of qualification for basic surgical procedures and invasive diagnostic and therapeutic procedures, rules of their performance and the most frequent complications	P7U_W, P7S_WG
F.W4	principles of perioperative safety, patient preparation for surgery, general and local anesthesia and controlled sedation	P7U_W, P7S_WG
F.W5	postoperative treatment with analgesic therapy and postoperative monitoring	P7U_W, P7S_WG
F.W6	indications and rules for the use of intensive care	P7U_W, P7S_WG
F.W7	guidelines for cardiopulmonary resuscitation of newborns, children and adults	P7U_W, P7S_WG
F.W8	principles of functioning of the integrated system National Medical Rescue Service	P7U_W, P7S_WG
F.W9	female reproductive functions, related disorders and diagnostic and therapeutic procedures concerning in particular: 1) the menstrual cycle and its disturbances, 2) pregnancy, 3) physiological and pathological childbirth and postpartum period, 4) genital cancers and inflammations, 5) birth control, 6) menopause, 7) basic diagnostic methods and gynecological procedures	P7U_W, P7S_WG
F.W10	problems of modern imaging examinations, in particular: 1) radiological symptomatology of major diseases, 2) instrumental methods and imaging techniques used to perform therapeutic procedures, 3) the indications, contraindications and preparation of the patient for particular types of imaging examination and contraindications for the use of contrast agents	P7U_W, P7S_WG
F.W11	issues related to diseases of the visual system, in particular: 1) the causes, symptoms, principles of diagnosis and therapeutic management of the most common ophthalmic diseases, 2) ophthalmic complications of systemic diseases and their ophthalmic symptomatology, and correct methods of dealing with these cases, 3) surgical management of specific eye diseases, 4) the main groups of drugs used in ophthalmology, their adverse reactions and interactions, 5) the groups of generally used medicines with complications and ophthalmic contraindications and their mechanism	P7U_W, P7S_WG

Kod	Treść	PRK
F.W12	issues related to laryngology, phoniatrics and audiology, including 1) causes, clinical course, methods of treatment, complications and prognosis of diseases of the ear, nose, paranasal sinuses, oral cavity, pharynx and larynx, 2) facial nerve disease and selected cervical structures, 3) rules for diagnostic and therapeutic management of mechanical injuries to the ear, nose, larynx and esophagus, 4) rules for emergency management in otorhinolaryngology, in particular in laryngeal dyspnea, 5) principles of diagnostic and therapeutic management of hearing, voice and speech impairments, 6) principles of diagnostic and therapeutic management of head and neck neoplastic diseases	P7U_W, P7S_WG
F.W13	causes, symptoms, principles of diagnosis and therapeutic management in case of the most frequent diseases of the central nervous system in the scope: 1) cerebral edema and its consequences, with particular reference to emergencies, 2) other forms of intracranial tightness with their consequences, 3) craniocerebral injuries, 4) vascular defects of the central nervous system, 5) neoplastic tumors of the central nervous system, 6) diseases of the vertebral column and spinal cord	P7U_W, P7S_WG
F.W14	in the basic scope, the issues of surgical transplantation, indications for transplantation of irreversibly damaged organs and tissues and the procedures related thereto	P7U_W, P7S_WG
F.W15	the principles of suspicion and diagnosis of brain death	P7U_W, P7S_WG
F.W16	procedure in accidental and posttraumatic hypothermia	P7U_W, P7S_WG
F.W17	the causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases requiring surgical intervention, taking into account the distinctness of childhood age and in particular: a) diseases of arterial and venous vessels b) diseases of the urinary tract c) heart and blood vessel diseases d) craniofacial diseases, acute and chronic diseases of the central nervous system	P7U_W, P7S_WG
F.W18	the most common complications of the procedures listed in F.W2	P7U_W, P7S_WG
F.W19	the most common complications associated with anesthesia, sedation and perioperative period	P7U_W, P7S_WG
F.W20	the rules of qualification, what they consist of, how they take place and what are the possible complications and consequences of surgical procedures: a) removal of appendix, gallbladder b) excision of the thyroid, parathyroid, adrenal glands c) excision of part and entirety of the stomach, large intestine d) abdominal hernias, using synthetic mesh e) surgical treatment of obesity	P7U_W, P7S_WG
F.W21	the qualifications rules, knows what they are, how they work and what are the possible consequences and complications of the following procedures: a) percutaneous and intraductive abdominal organ ultrasonography f) b) endoscopic gastrointestinal diagnostic and therapeutic procedures c) endoscopic diagnostic and respiratory therapeutic procedures (bronchoscopy, endoscopic ultrasound bronchoscopy) d) endoscopic diagnostic and therapeutic procedures for the urinary tract (cystoscopy) e) endoscopic diagnostic and therapeutic procedures for the locomotor system (arthroscopy) f) screening tests used for the early detection of gastrointestinal neoplasms	P7U_W, P7S_WG

G. Law and organizational aspects of medicine

In terms of knowledge, the graduate knows and understands:

Kod	Treść	PRK
G.W1	methods of individual and population health assessment, different systems of disease classification and medical procedures	P7S_WK
G.W2	the identification and testing of risk factors, the advantages and disadvantages of different types of epidemiological studies and measures demonstrating the presence of cause and effect relationships	P7U_W, P7S_WG

Kod	Treść	PRK
G.W3	epidemiology of infectious and chronic diseases, ways of preventing their occurrence at various stages of the natural history of the disease and the role of epidemiological surveillance	P7U_W, P7S_WG
G.W4	the concept of public health, its objectives, 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 health protection options	P7S_WK
G.W5	legal regulations concerning the provision of health services, patient's rights, grounds for practicing the profession of doctor and functioning of medical self-government	P7U_W, P7S_WK
G.W6	basic legal regulations regarding the organization and financing of health care, general health insurance and the principles of organization of units performing medical activities	P7U_W, P7S_WK
G.W7	legal obligations of the doctor concerning pronouncement of death	P7U_W, P7S_WK
G.W8	legal regulations and basic methods of medical experimentation and other medical research, including basic methods of data analysis	P7U_W, P7S_WK
G.W9	legal regulations concerning transplantation, artificial procreation, abortion, aesthetic procedures, palliative treatment, mental illness, etc.	P7U_W, P7S_WK
G.W10	principles of pharmaceutical law	P7U_W, P7S_WK
G.W11	legal regulations concerning medical confidentiality, keeping medical records, criminal, civil and professional liability of a doctor	P7U_W, P7S_WK
G.W12	the concept of violent and sudden death and the difference between the concepts of injury and damage	P7U_W, P7S_WG
G.W13	legal grounds and rules of doctor's conduct during examination of the body at the place of its disclosure and judicial and medical examination of the body	P7U_W, P7S_WK
G.W14	principles of court-medical diagnostics and opinions in cases concerning infanticide and reconstruction of circumstances of a road accident	P7U_W, P7S_WK
G.W15	rules of preparation of opinon of expert witness in criminal matters	P7U_W, P7S_WK
G.W16	principles of judicial and medical opinion on the ability to participate in procedural activities, biological effect and health impairment	P7U_W, P7S_WK
G.W17	the concept of medical error, the most common causes of medical errors and the principle of giving opinions in such cases	P7U_W, P7S_WK
G.W18	principles of material collection for toxicological and hemogenetic tests	P7U_W, P7S_WG
G.W19	situations in which there are conflicts between values and principles relating to the medical profession and the provision of health services, and provide a justification for the decisions taken	P7U_W, P7S_WG
G.W20	legal grounds and rules for conducting judicial and medical autopsy, applying in specific cases additional techniques of autopsy and post-mortem imaging examinations	P7U_W, P7S_WK
G.W21	legal grounds and rules of doctor's conduct during examination of the body at the place of its disclosure and judicial and medical examination of the body	P7U_W, P7S_WK
G.W22	rules for estimating the time of death on the basis of death signs	P7U_W, P7S_WG
G.W23	the importance of environmental xenobiotics, including their exogenous transformation and the role of biomarkers (exposure, effects, vulnerability) in the diagnosis of environmental and occupational diseases	P7U_W, P7S_WG

Umiejętności

Ogólne

In terms of skills, the graduate can:

Kod	Treść	PRK
O.U1	identify medical problems and prioritize medical management	P7U_U, P7S_UW
O.U2	identify life-threatening conditions that require immediate medical intervention	P7U_U, P7S_UW
O.U3	plan the diagnostic procedure and interpret its results	P7U_U, P7S_UW, P7S_UU
O.U4	implement appropriate and safe therapeutic treatment and predict its effects	P7U_U, P7S_UW
O.U5	plan own learning activities and constantly learn in order to update own knowledge	P7U_U, P7S_UW, P7S_UU
O.U6	inspire the learning process of others	P7U_U, P7S_UW
O.U7	communicate with the patient and his family in an atmosphere of trust, taking into account the needs of the patient	P7S_UK
O.U8	communicate and share knowledge with colleagues in a team	P7S_UK
O.U9	critically evaluate the results of scientific research and adequately justify the position	P7U_U, P7S_UW

Szczegółowe

A. Morphological education

In terms of skills, the graduate can:

Kod	Treść	PRK
A.U1	operate an optical microscope, including the use of immersion	P7U_U, P7S_UW
A.U2	recognize histological structures corresponding to organs, tissues, cells and cellular structures in optical or electron microscopy images, describe and interpret their structure and relations between structure and function	P7U_U, P7S_UW
A.U3	explain the anatomical basis of the physical examination	P7U_U, P7S_UW
A.U4	propose relations between anatomical structures on the basis of life-threatening diagnostic tests, in particular in the field of radiology (plain scans, contrast tests, computed tomography and nuclear magnetic resonance imaging)	P7U_U, P7S_UW
A.U5	use anatomical, histological and embryological denominations in speech and writing	P7U_U, P7S_UW

B. Scientific basics of medicine

In terms of skills, the graduate can:

Kod	Treść	PRK
B.U1	use knowledge of the laws of physics to explain the effects of external factors such as temperature, acceleration, pressure, electromagnetic field and ionising radiation on the body and its elements	P7U_U, P7S_UW
B.U2	assess the harmfulness of the dose of ionising radiation and comply with the principles of radiological protection	P7U_U, P7S_UW

Kod	Treść	PRK
B.U3	calculate the molar and percentage concentrations of compounds and the concentrations of substances in isoosmotic, mono- and multicomponent solutions	P7U_U, P7S_UW
B.U4	calculate the solubility of inorganic compounds, determine the chemical background to the solubility or absence of organic compounds and its practical importance for dietetics and therapy	P7U_U, P7S_UW
B.U5	determine the pH of the solution and the effect of changes in pH on inorganic and organic compounds	P7U_U, P7S_UW
B.U6	predict the direction of biochemical processes depending on the energetic state of cells	P7U_U, P7S_UW
B.U7	perform simple functional tests assessing the human body as a stable regulation system (stress tests, exercise tests) and interpret numerical data on basic physiological variables	P7U_U, P7S_UW
B.U8	use basic laboratory techniques such as qualitative analysis, titration, colorimetry, pH-metry, chromatography, electrophoresis of proteins and nucleic acids	P7U_U, P7S_UW
B.U9	operate simple measuring instruments and evaluate the accuracy of measurements made	P7U_U, P7S_UW
B.U10	use databases, including online databases, and search for the necessary information using the available tools	P7U_U, P7S_UW
B.U11	select appropriate statistical tests, conduct basic statistical analyses, use appropriate methods of presenting results, interpret the results of meta-analyses and analyze the probability of survival	P7U_U, P7S_UW
B.U12	explain and prioritize differences between prospective and retrospective, randomized and clinical-control studies, case reports and experimental studies according to the reliability and quality of scientific evidence	P7U_U, P7S_UW
B.U13	plan and perform simple scientific research and interpret its results and draw conclusions	P7U_U, P7S_UW, P7S_UU
B.U14	indicate the relationship between factors disturbing the balance of biological processes and physiological and pathophysiological changes	P7U_U, P7S_UW
B.U15	identify sources of electrical signals in the body	P7U_U, P7S_UW
B.U16	perform a pathophysiological analysis of selected clinical cases according to the PBCA (Problem Based Case Analysis) rule	P7U_U, P7S_UW
B.U17	perform and interpret anthropometric measurements of nutritional status, is able to gather nutritional history and make a quantitative and qualitative assessment of intake (taking into account dietary supplements) using a nutritional computer program	P7U_U, P7S_UW
B.U18	assess the reliability of the clinical trial	P7U_U, P7S_UW
B.U19	understand the concepts describing the strength of the intervention in the study	P7U_U, P7S_UW
B.U20	understand the concept of meta-analysis and how to present its results	P7U_U, P7S_UW
B.U21	use on-line photo, audio and video libraries	P7U_U, P7S_UW
B.U22	use equipment for the reproduction of three-dimensional video images	P7U_U, P7S_UW
B.U23	use on-line databases of the human genome	P7U_U, P7S_UW
B.U24	use the Internet databases of genetic disorders	P7U_U, P7S_UW
B.U25	use a telemedicine tool for teleconsultation purposes	P7U_U, P7S_UW
B.U26	use various types of computer simulators and e-learning tools for educational purposes, with particular emphasis on virtual patients	P7U_U, P7S_UW

Kod	Treść	PRK
B.U27	use computer simulators to support the medical decision-making process	P7U_U, P7S_UW
B.U28	provide expert knowledge through simple IT techniques of knowledge representation such as a block diagram or a rule database	P7U_U, P7S_UW
B.U29	protect clinical data against unauthorized access	P7U_U, P7S_UW
B.U30	use e-learning platforms	P7U_U, P7S_UW
B.U31	prepare materials for on-line presentations	P7U_U, P7S_UW

C. Preclinical course

In terms of skills, the graduate can:

Kod	Treść	PRK
C.U1	analyze genetic crossbreeds and pedigrees of human traits and diseases, and assess the risk of having a child with chromosome aberrations	P7U_U, P7S_UW
C.U2	identify indications for prenatal testing	P7U_U, P7S_UW
C.U3	make decisions about the need for cytogenetic and molecular tests	P7U_U, P7S_UW
C.U4	perform morphometric measurements, analyze morphograms and record karyotypes of diseases	P7U_U, P7S_UW
C.U5	estimate the risk of a given disease becoming apparent in the offspring based on family predisposition and the influence of environmental factors	P7U_U, P7S_UW
C.U6	assess environmental hazards and use basic methods to detect the presence of harmful (biological and chemical) factors in the biosphere	P7U_U, P7S_UW
C.U7	recognize the most frequent human parasites on the basis of their structure, life cycles and symptoms of illnesses	P7U_U, P7S_UW
C.U8	use the antigen-antibody reaction in current modifications and techniques for the diagnosis of infectious, allergic, autoimmune and neoplastic diseases and blood diseases	P7U_U, P7S_UW
C.U9	prepare preparations and identify pathogens under the microscope	P7U_U, P7S_UW
C.U10	interpret the results of microbiological tests	P7U_U, P7S_UW
C.U11	link images of tissue and organ damage with clinical signs of disease, history and results of laboratory tests	P7U_U, P7S_UW
C.U12	analyze reaction, defense and adaptation phenomena and regulatory disturbances caused by an etiological factor	P7U_U, P7S_UW
C.U13	perform simple pharmacokinetic calculations	P7U_U, P7S_UW
C.U14	select drugs at appropriate doses in order to correct pathological phenomena in the system and in individual organs	P7U_U, P7S_UW
C.U15	design schemes of rational chemotherapy of infections, empirical and targeted ones	P7U_U, P7S_UW
C.U16	prepare records of all forms of prescription medicinal substances	P7U_U, P7S_UW
C.U17	use pharmaceutical guides and databases on medicinal products	P7U_U, P7S_UW
C.U18	assess toxicological hazards in specific age groups and in conditions of hepatic and renal failure, and prevent drug poisoning	P7U_U, P7S_UW
C.U19	interpret the results of toxicological tests	P7U_U, P7S_UW

Kod	Treść	PRK
C.U20	describe the changes in function of the organism in homeostasis disorder, determine its integrated reaction to physical effort, high and law teperature, blood or water loss, sudden verticalization, transition from sleep to wakefulness	P7U_U, P7S_UW

D. Behavioral and social sciences with elements of professionalism

In terms of skills, the graduate can:

Kod	Treść	PRK
D.U1	take into account the subjective needs and expectations of the patient resulting from socio-cultural conditions in the process of therapeutic management	P7U_U, P7S_UW
D.U2	identify signs of anti-health and self-destructive behavior and respond appropriately to them	P7U_U, P7S_UW
D.U3	choose treatment that minimizes the social consequences for the patient	P7U_U, P7S_UW
D.U4	build an atmosphere of trust throughout the entire diagnostic and treatment process	P7U_U, P7S_UW
D.U5	talk to the adult patient, child and family using active listening and empathy techniques and talk to the patient about his or her life situation	P7U_U, P7S_UW
D.U6	inform the patient about the purpose, course and possible risks of the proposed diagnostic or therapeutic measures, and obtain his or her informed consent to take these measures	P7U_U, P7S_UW
D.U7	involve the patient in the therapeutic process	P7U_U, P7S_UW
D.U8	provide the patient and his or her family with information about unfavorable prognosis	P7U_U, P7S_UW
D.U9	provide advice on therapeutic recommendation compliance and following healthy lifestyle	P7U_U, P7S_UW
D.U10	identify risk factors for violence, recognize violence and respond accordingly	P7U_U, P7S_UW
D.U11	apply basic psychological motivational and supportive interventions	P7U_U, P7S_UW
D.U12	communicate with colleagues with constructive feedback and support	P7U_U, P7S_UW, P7S_UK
D.U13	comply with ethical standards in professional activities	P7U_U, P7S_UW
D.U14	recognise the ethical dimension of medical decisions and distinguish between factual and normative aspects	P7U_U, P7S_UW
D.U15	follow the patient's rights	P7U_U, P7S_UW
D.U16	show responsibility for improving your qualifications and transferring knowledge to others	P7U_U, P7S_UW
D.U17	critically analyse medical literature, including in English, and draw conclusions	P7U_U, P7S_UW
D.U18	communicate with the patient in one of the foreign languages at B2+ level of the Common European Framework of Reference for Languages	P7U_U, P7S_UW
D.U19	take action to improve the quality of life of patients and prevent it from deteriorating in the future	P7U_U, P7S_UW
D.U20	recognise and apply measures provided for by law when it is necessary to take medical action without consent or with the use of coercion	P7U_U, P7S_UW
D.U21	be able to work in a multiprofessional team, in a multicultural and multinational environment	P7U_U, P7S_UW
D.U22	demonstrate responsibility for one’s own professional development, contribute to the further development of sciences, transfer own knowledge to others	P7U_U, P7S_UW

E. Clinical non-procedural medical disciplines

In terms of skills, the graduate can:

Kod	Treść	PRK
E.U1	carry out a medical history with an adult patient	P7U_U, P7S_UW
E.U2	carry out a medical interview with the child and his or her family	P7U_U, P7S_UW
E.U3	conduct a full and targeted physical examination of an adult patient	P7U_U, P7S_UW
E.U4	carry out a physical examination of a child of all ages	P7U_U, P7S_UW
E.U5	conduct a psychiatric examination	P7U_U, P7S_UW
E.U6	conduct an approximate hearing and field of vision examination, and an otoscopic examination	P7U_U, P7S_UW
E.U7	assess the general condition, state of consciousness and awareness of the patient	P7U_U, P7S_UW
E.U8	assess the condition of the newborn on the Apgar scale and its maturity, and examine neonatal reflexes	P7U_U, P7S_UW
E.U9	compile anthropometric and blood pressure measurements with data on centile grids	P7U_U, P7S_UW
E.U10	assess the degree of advancement of puberty	P7U_U, P7S_UW
E.U11	conduct routine health checks	P7U_U, P7S_UW
E.U12	perform differential diagnosis of the most common diseases of adults and children	P7U_U, P7S_UW
E.U13	evaluate and describe the somatic and mental state of the patient	P7U_U, P7S_UW
E.U14	recognize immediate life-threatening conditions	P7U_U, P7S_UW
E.U15	recognize the condition after drinking alcohol, after using drugs and other substances	P7U_U, P7S_UW
E.U16	plan diagnostic, therapeutic and prophylactic procedures	P7U_U, P7S_UW, P7S_UU
E.U17	analyze the potential adverse reactions of individual medicines and the interactions between them	P7U_U, P7S_UW
E.U18	propose individualization of existing therapeutic guidelines and other methods of treatment in the face of ineffectiveness or contraindications to standard therapy	P7U_U, P7S_UW
E.U19	recognize the symptoms of drug dependence and propose treatment	P7U_U, P7S_UW
E.U20	qualify the patient for home and hospital treatment	P7U_U, P7S_UW
E.U21	recognize states in which the duration of life, functional state or patient preferences limit the conduct in accordance with the guidelines specified for a given disease	P7U_U, P7S_UW
E.U22	make a functional assessment of a patient with a disability	P7U_U, P7S_UW
E.U23	propose a rehabilitation program for the most common diseases	P7U_U, P7S_UW
E.U24	interpret the results of laboratory tests and identify the causes of abnormalities	P7U_U, P7S_UW
E.U25	apply nutritional treatment, including enteral and parenteral nutrition	P7U_U, P7S_UW
E.U26	plan the management of exposure to blood-borne infections	P7U_U, P7S_UW
E.U27	qualify the patient for vaccination	P7U_U, P7S_UW
E.U28	collect and retain test material for use in laboratory diagnostics	P7U_U, P7S_UW

Kod	Treść	PRK
E.U29	perform basic procedures and medical procedures including: 1) body temperature measurement, heart rate measurement, non-invasive blood pressure measurement, 2) monitoring of vital signs by means of a patient monitor, pulse oximetry, 3) spirometric examination, oxygen therapy, assisted ventilation and replacement ventilation, 4) introduction of the oropharyngeal tube, 5) intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of blood for culture, collection of arterialized capillary blood, collection of arterialized capillary blood, 6) taking nasal, throat and skin swabs, puncturing of the pleural cavity, 7) bladder catheterization in women and men, gastric tube, gastric lavage, gastric lavage, enema, 8) standard resting electrocardiogram with interpretation, electrical cardioversion and cardiac defibrillation, 9) simple strip tests and blood glucose measurements	P7U_U, P7S_UW
E.U30	assist in the performance of the following procedures and medical procedures: 1) transfusion of blood and blood-derived products, 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) epidermal tests, 8) intradermal and scarification tests and interpret their results	P7U_U, P7S_UW
E.U31	interpret pharmaceutical characteristics of medicinal products and critically assess advertising materials for medicines	P7U_U, P7S_UW
E.U32	plan specialist consultations	P7U_U, P7S_UW, P7S_UU
E.U33	implement basic treatment for acute poisoning	P7U_U, P7S_UW
E.U34	monitor the condition of a patient poisoned with chemicals or drugs E.U35. assess bedsores and apply appropriate dressings	P7U_U, P7S_UW
E.U35	assess pressure ulcers and use appropriate dressings	P7U_U, P7S_UW
E.U36	proceed in case of injuries (dress or immobilize, dress and suture the wound)	P7U_U, P7S_UW
E.U37	recognize the agony of the patient and determine his death	P7U_U, P7S_UW
E.U38	maintain patient's medical records	P7U_U, P7S_UW
E.U39	assist in the performance of the following procedures and medical procedures: (i) bone marrow aspiration biopsy	P7U_U, P7S_UW
E.U40	select appropriate physical activity in the developmental period of children and adolescents and propose health training in adulthood, both in health and disease	P7U_U, P7S_UW
E.U41	qualify children and young people for physical education and sports, and adults for appropriate physical activity. Interprets the stress tests	P7U_U, P7S_UW
E.U42	recognise the state of overtraining and overloading of internal organs and motor organs associated with practicing sport. Is able to prevent and manage dehydration and physical exercise disorders in various conditional environments	P7U_U, P7S_UW
E.U43	offer appropriate nutritional management to people in developmental age and adults with intensive exercise Interprets measures prohibited in sport. Identifies types and support measures	P7U_U, P7S_UW
E.U44	define the concepts of nuclear medicine, radiopharmacy and radioimmunology	P7U_U, P7S_UW
E.U45	describe the physical processes that are the basis for radiopharmaceutical imaging	P7U_U, P7S_UW
E.U46	list radiopharmaceuticals used for scintigraphic diagnostics and PET, indicate indications for various types of diagnostic tests and the principles of interpretation of the obtained images	P7U_U, P7S_UW
E.U47	list the radioactive isotopes used for nuclear medicine therapies and justify their selection, as well as the basic isotope therapies, the indications for radionuclide therapy, how to assess the effectiveness of the therapy, the possible complications following the therapy	P7U_U, P7S_UW

Kod	Treść	PRK
E.U48	identify ways in which the ALARA radiological protection principle can be implemented in practice with regard to nuclear medicine	P7U_U, P7S_UW
E.U49	make smear tests for malaria	P7U_U, P7S_UW
E.U50	negotiate patient referral for psychotherapy and empathic patient support during a crisis	P7U_U, P7S_UW
E.U51	understand the importance and organization of support groups for chronic patients and their families, and Balint groups for medical staff	P7U_U, P7S_UW

F. Clinical procedural sciences

In terms of skills, the graduate can:

Kod	Treść	PRK
F.U1	assist in a typical surgical procedure, prepare the surgical field and apply local anesthesia to the operated area	P7U_U, P7S_UW
F.U2	use basic surgical instruments	P7U_U, P7S_UW
F.U3	adhere to the principles of asepsis and antisepsis	P7U_U, P7S_UW
F.U4	manage a simple wound, put on and change a sterile surgical dressing	P7U_U, P7S_UW
F.U5	make a peripheral puncture	P7U_U, P7S_UW
F.U6	examine breasts, lymph nodes, thyroid gland and abdominal cavity in terms of acute abdomen and perform digital rectal examination	P7U_U, P7S_UW
F.U7	evaluate the result of a radiological examination in the most common types of fractures, particularly long bone fractures	P7U_U, P7S_UW
F.U8	perform temporary immobilization of the limb, choose the type of immobilization necessary for use in typical clinical situations and control the correctness of blood supply to the limb after the insertion of the immobilizing dressing	P7U_U, P7S_UW
F.U9	manage external bleeding	P7U_U, P7S_UW
F.U10	perform basic resuscitation procedures using an automatic external defibrillator and other emergency procedures and first aid	P7U_U, P7S_UW
F.U11	operate according to the algorithm of advanced resuscitation activities	P7U_U, P7S_UW
F.U12	monitor the patient's condition in the post-operative period based on basic vital parameters	P7U_U, P7S_UW
F.U13	recognize subjective and physical symptoms indicating the abnormal course of pregnancy (abnormal bleeding, contractions of the uterus)	P7U_U, P7S_UW
F.U14	interpret the results of physical examination of a pregnant woman (arterial pressure, functioning of the mother's and fetus' heart) and the results of laboratory tests proving the pathologies of pregnancy	P7U_U, P7S_UW
F.U15	interpret the cardiotocography (CTG)	P7U_U, P7S_UW
F.U16	recognize the beginning of labor and its incorrect duration	P7U_U, P7S_UW
F.U17	interpret subjective signs and symptoms during the time of confinement	P7U_U, P7S_UW
F.U18	establish recommendations, indications and contraindications concerning the use of contraceptive methods	P7U_U, P7S_UW
F.U19	perform ophthalmic screening tests	P7U_U, P7S_UW
F.U20	recognize ophthalmologic conditions requiring immediate specialist help and provide preliminary, qualified help in cases of physical and chemical injuries of the eye	P7U_U, P7S_UW

Kod	Treść	PRK
F.U21	evaluate the condition of the unconscious patient according to international scoring scales	P7U_U, P7S_UW
F.U22	recognise the symptoms of increasing intracranial pressure	P7U_U, P7S_UW
F.U23	assess the indications for suprapubic puncture and participate in its performance	P7U_U, P7S_UW
F.U24	assist in typical urological procedures (diagnostic and therapeutic endoscopy of the urinary tract, lithotripsy, prostate puncture)	P7U_U, P7S_UW
F.U25	perform basic laryngological examination of the ear, nose, pharynx and larynx	P7U_U, P7S_UW
F.U26	conduct an approximate hearing test	P7U_U, P7S_UW
F.U27	operate according to a current algorithm for advanced resuscitation activities: a) is able to open the airway using non-instrumented and instrumented techniques endoscopic retrograde cholangiopancreatography) b) is able to ventilate the patient with a self-expanding bag with a face mask c) is able to operate the manual defibrillator safely	P7U_U, P7S_UW
F.U28	can tie a single and surgical knot	P7U_U, P7S_UW
F.U29	can examine the breasts, the abdomen and perform a digital rectal examination	P7U_U, P7S_UW
F.U30	can perform and interpret FAST ultrasound (Focused Assessment with Sonography for Trauma)	P7U_U, P7S_UW
F.U31	insert a drain into the pleural cavity and connect the set for an active pleural drain	P7U_U, P7S_UW
F.U32	insert a catheter into the bladder	P7U_U, P7S_UW
F.U33	to take the informed and legally effective consent: a) for high-risk diagnostic procedures (e.g. gastroscopy, colonoscopy), endoscopic retrograde cholangiopancreatography) b) for high-risk diagnostic procedures (transcutaneous biopsy under control) USG) c) surgery to remove the gallbladder	P7U_U, P7S_UW
F.U34	to pass on information about the death of a close friend and relative	P7U_U, P7S_UW
F.U35	provide family with information on the possibility of organ transplantation of the person who was diagnosed with brain death	P7U_U, P7S_UW
F.U36	identify and indicate methods of management of traumatic peripheral nerve damage	P7U_U, P7S_UW

G. Law and organizational aspects of medicine

In terms of skills, the graduate can:

Kod	Treść	PRK
G.U1	describe the demographic structure of the population, and based on that assess the health problems of the population	P7U_U, P7S_UW
G.U2	collect information on the presence of risk factors for communicable and chronic diseases and plan prevention activities at different levels of prevention	P7U_U, P7S_UW, P7S_UU
G.U3	interpret the measures of the incidence of diseases and disabilities	P7U_U, P7S_UW
G.U4	assess the epidemiological situation of diseases commonly found in the Republic of Poland and in the world	P7U_U, P7S_UW
G.U5	explain basic rights and the legal basis for the provision of medical services to recipients of medical services	P7U_U, P7S_UW
G.U6	apply legal regulations regarding the issue of medical certificates for the needs of patients, their families and other entities	P7U_U, P7S_UW
G.U7	recognise the behaviors and symptoms indicating the possibility of violence against the child during the examination of the child	P7U_U, P7S_UW

Kod	Treść	PRK
G.U8	act in a manner that avoids medical errors	P7U_U, P7S_UW
G.U9	take blood for toxicological tests and protect the material for hemogenetic tests	P7U_U, P7S_UW
G.U10	cooperate with other professions in the field of health protection	P7U_U, P7S_UW
G.U11	identify the relevant legislation containing standards for the provision of health services and the medical profession	P7U_U, P7S_UW
G.U12	when providing emergency aid, make efforts not to destroy important forensic evidence which does not interfere with the primary objective of medical intervention (saving lives / health)	P7U_U, P7S_UW
G.U13	conducts community interview, is able to interpret levels of pollution in the aspect of effective standards, and is able to identify organs and systems susceptible to harmful substances, the performance of individual xenobiotics present in the environment and the working environment	P7U_U, P7S_UW

Kompetencje społeczne

Ogólne

Within the scope of competence, the graduate is ready to:

Kod	Treść	PRK
O.K1	to establish and maintain deep and respectful contact with patients and to show understanding for differences in world views and cultures	P7S_KK, P7S_KO, P7S_KR
O.K2	to be guided by the well-being of a patient	P7S_KK
O.K3	respect medical confidentiality and patients' rights	P7S_KK, P7S_KR
O.K4	take actions towards the patient on the basis of ethical norms and principles, with an awareness of the social determinants and limitations of the disease	P7S_KK
O.K5	perceive and recognize own limitations and self-assessing educational deficits and needs	P7S_KK, P7S_KR
O.K6	promote health-promoting behaviors	P7U_K, P7S_KK, P7S_KO
O.K7	use objective sources of information	P7S_KK
O.K8	formulate conclusions from own measurements or observations	P7S_KR
O.K9	implement the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment	P7U_K, P7S_KK, P7S_KO
O.K10	formulate opinions on the various aspects of the professional activity	P7S_KK, P7S_KR
O.K11	assume responsibility for decisions taken in the course of their professional activities, including in terms of the safety of oneself and others	P7U_K, P7S_KR

Plany studiów

Semestr 1

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Physical Education	A	classes: 30	-	-	O	Os
Anatomy with Embryology	A	dissection classes: 69 seminar: 3 lecture: 22	-	-	O	Os
Biochemistry with Elements of Chemistry	B	e-learning: 14 lecture: 10 laboratory: 23 seminar: 12	-	-	O	Or
Physiology	B	laboratory: 23 lecture: 65	-	-	O	Os
Histology with Cytophysiology	A	laboratory: 36 e-learning: 24	-	-	O	Os
History of Medicine	D	e-learning: 24 seminar: 1	2,0	examination	O	Os
First Aid	F	classes: 20 lecture: 10	2,0	credit	O	Or
Medical Polish	D	foreign language course: 60	-	-	O	Or
Health and Safety		Health and Safety training: 5	-	credit	O	Os

Semestr 2

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Physical Education	A	classes: 30	-	credit	O	Os
Anatomy with Embryology	A	dissection classes: 69 seminar: 3 lecture: 22	13,0	examination	O	Os
Biochemistry with Elements of Chemistry	B	e-learning: 10 lecture: 8 laboratory: 19 seminar: 20	10,0	credit	O	Or
Ethics in Medicine	D	seminar: 30	2,0	graded credit	O	Os
Physiology	B	laboratory: 22 lecture: 65	12,0	examination	O	Os
Genetics with Molecular Biology	B, C	laboratory: 2 seminar: 6 lecture: 22	2,0	graded credit	O	Os
Histology with Cytophysiology	A	laboratory: 28 e-learning: 20	11,0	examination	O	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
First Aid	F	classes: 20 lecture: 10	2,0	credit	O	Or
Medical Polish	D	foreign language course: 60	5,0	credit	O	Or
Patient Care - summer clerkship	I	professional practice: 120	4,0	credit	O	Os

It is necessary to choose 1 elective subject from each group – total 5 electives (one during 2nd year, two during 3rd year and two during 5th year).

Semestr 3

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Biochemistry with Elements of Chemistry	B	e-learning: 12 laboratory: 12 seminar: 28 lecture: 22	6,0	examination	O	Os
Medical Polish	D	foreign language course: 60	-	-	O	Or
Laboratory Diagnostics	E	e-learning: 4 seminar: 12 classes: 24	2,0	credit	O	Or
Laboratory Training of Clinical Skills	D	simulations: 39	2,0	credit	O	Or
Pathology	C	dissection classes: 4 e-learning: 1 seminar: 38 classes: 54 lecture: 14	-	-	O	Os
Medical Psychology	D	seminar: 45	2,0	graded credit	O	Os
Medical Sociology	D	seminar: 30	2,0	graded credit	O	Os
Introduction to Clinical Scinces	B, D	classes: 63 lecture: 3	3,0	graded credit	O	Os
HUMANITIES IN MEDICINE	D				O	Os
Philosophy and ethics of human sexuality	D	seminar: 30	3,0	graded credit	F	Os
Philosophy of Medicine	D	seminar: 30	3,0	graded credit	F	Os
The main problems of human philosophy	D	seminar: 30	3,0	graded credit	F	Os
Medicine of the Third Reich	D	lecture: 30	3,0	graded credit	F	Os
Neuroethics	D	seminar: 30	3,0	graded credit	F	Os
Crossing the limits of humanity - Ethics towards the scientific and technological challenges of progress in medicine	D	seminar: 30	3,0	graded credit	F	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Introduction to the philosophy of science	D	seminar: 30	3,0	graded credit	F	Os
Neurodegeneration, diseases in art and famous forgers	D	lecture: 30	3,0	graded credit	F	Os
History of Philosophy	D	seminar: 30	3,0	graded credit	F	Os

Semestr 4

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
First Aid	F	seminar: 6 classes: 24	2,0	graded credit	O	Os
Medical Biophysics	B	laboratory: 28 seminar: 10 e-learning: 10	3,0	examination	O	Os
Pharmacology	C	seminar: 25 lecture: 25	4,0	credit	O	Or
Hygiene	G	seminar: 20	1,0	graded credit	O	Os
Medical Polish	D	foreign language course: 30	4,0	credit	O	Or
Microbiology with Parasitology and Immunology	C	laboratory: 27 seminar: 16 lecture: 37	6,0	examination	O	Os
Pathology	C	dissection classes: 4 seminar: 38 classes: 54 lecture: 14	15,0	examination	O	Os
Telemedicine with Elements of Medical Simulation	B	classes: 30	2,0	graded credit	O	Os
Primary Care - summer clerkship	I	professional practice: 90	3,0	credit	O	Os
Emergency Medicine - summer clerkship	I	professional practice: 30	1,0	credit	O	Os
HUMANITIES IN MEDICINE	D				O	Os
Philosophy and ethics of human sexuality	D	seminar: 30	3,0	graded credit	F	Os
Philosophy of Medicine	D	seminar: 30	3,0	graded credit	F	Os
The main problems of human philosophy	D	seminar: 30	3,0	graded credit	F	Os
Medicine of the Third Reich	D	lecture: 30	3,0	graded credit	F	Os
Neuroethics	D	seminar: 30	3,0	graded credit	F	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Crossing the limits of humanity - Ethics towards the scientific and technological challenges of progress in medicine	D	seminar: 30	3,0	graded credit	F	Os
Introduction to the philosophy of science	D	seminar: 30	3,0	graded credit	F	Os
Neurodegeneration, diseases in art and famous forgers	D	lecture: 30	3,0	graded credit	F	Os
History of Philosophy	D	seminar: 30	3,0	graded credit	F	Os

It is necessary to choose 1 elective subject from each group – total 5 electives (one during 2nd year, two during 3rd year and two during 5th year)

Semestr 5

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Surgery	C, B, A, F	seminar: 35 classes: 57 lecture: 34	7,0	credit	O	Or
Internal Medicine	E	seminar: 52 classes: 78	7,0	credit	O	Or
Dermatology and Venerology	E	seminar: 30 classes: 28	3,0	examination	O	Os
Laboratory Diagnostics	E	e-learning: 6 seminar: 20	2,0	examination	O	Os
Epidemiology	G	seminar: 25	2,0	graded credit	O	Os
Pharmacology	C	seminar: 22 lecture: 23	-	-	O	Os
Obstetrics and Gynecology	F	seminar: 20 classes: 20	3,0	credit	O	Or
Medical Polish	D	foreign language course: 60	-	-	O	Or
Laboratory Training of Clinical Skills	E, F	e-learning: 12 classes: 18	2,0	credit	O	Or
Pediatrics	E, C	seminar: 68 classes: 66	7,0	credit	O	Or
Psychiatry	E	seminar: 20	1,0	credit	O	Or
Radiology and Basis of Ultrasonography	F	seminar: 57 classes: 11 lecture: 8	4,0	examination	O	Os
PRECLINICAL SCIENCES	C				O	Os
Potable water and health	C	seminar: 30	2,0	graded credit	F	Os
Biostatistics	C	seminar: 10 classes: 20	2,0	graded credit	F	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Medicine in "OMICS"	C	seminar: 15 classes: 15	2,0	graded credit	F	Os
Practical aspects of diagnostics of genetically determined diseases	C	seminar: 10 classes: 20	2,0	graded credit	F	Os
Trends in nutrition of healthy people	C	seminar: 30	2,0	graded credit	F	Os
Diet-sensitive genes - e-learning course	C	lecture: 30	2,0	graded credit	F	Os
Behavioral and Social Sciences with Elements of Professionalism	D				O	Os
Research ethics involving human in medicine	D	seminar: 30	2,0	graded credit	F	Os
Philosophy and ethics of public health	D	seminar: 30	2,0	graded credit	F	Os
Limit problems of human existence: suicide, assisted suicide, euthanasia	D	seminar: 30	2,0	graded credit	F	Os
Cultural psychology in the context of health and illness issues.	D	seminar: 30	2,0	graded credit	F	Os
Body’s circadian rhythm in health and diseases	D	seminar: 30	2,0	graded credit	F	Os
Business plan and marketing communication	D	classes: 20 lecture: 10	2,0	graded credit	F	Os
Management and decision making	D	seminar: 20 classes: 10	2,0	graded credit	F	Os
Medical Writing	D	seminar: 15 lecture: 15	2,0	graded credit	F	Os
Disability and independent life. The social dimension.	D	classes: 20 lecture: 10	2,0	graded credit	F	Os
Ethical aspects of interpersonal communication in medicine	D	e-learning: 10 seminar: 20	2,0	graded credit	F	Os

Semestr 6

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Surgery	C, B, F, A	seminar: 35 classes: 57 lecture: 34	7,0	credit	O	Or
Internal Medicine	E	seminar: 52 classes: 78	7,0	credit	O	Or
Dermatology and Venerology	E	seminar: 30 classes: 28	3,0	examination	O	Os
Laboratory Diagnostics	E	e-learning: 6 seminar: 20	2,0	examination	O	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Epidemiology	G	seminar: 25	2,0	graded credit	O	Os
Pharmacology	C	seminar: 23 lecture: 22	9,0	examination	O	Os
Obstetrics and Gynecology	F	seminar: 20 classes: 20	3,0	credit	O	Or
Medical Polish	D	foreign language course: 60	5,0	credit	O	Or
Laboratory Training of Clinical Skills	F, E	e-learning: 12 classes: 18	2,0	credit	O	Or
Pediatrics	C, E	seminar: 68 classes: 66	7,0	credit	O	Or
Psychiatry	E	seminar: 20	1,0	credit	O	Or
Radiology and Basis of Ultrasonography	F	seminar: 57 classes: 11 lecture: 8	4,0	examination	O	Os
Internal Medicine - summer clerkship	I	professional practice: 120	4,0	credit	O	Os
PRECLINICAL SCIENCES	C				O	Os
Potable water and health	C	seminar: 30	2,0	graded credit	F	Os
Biostatistics	C	seminar: 10 classes: 20	2,0	graded credit	F	Os
Medicine in "OMICS"	C	seminar: 15 classes: 15	2,0	graded credit	F	Os
Practical aspects of diagnostics of genetically determined diseases	C	seminar: 10 classes: 20	2,0	graded credit	F	Os
Trends in nutrition of healthy people	C	seminar: 30	2,0	graded credit	F	Os
Diet-sensitive genes - e-learning course	C	lecture: 30	2,0	graded credit	F	Os
Behavioral and Social Sciences with Elements of Professionalism	D				O	Os
Research ethics involving human in medicine	D	seminar: 30	2,0	graded credit	F	Os
Philosophy and ethics of public health	D	seminar: 30	2,0	graded credit	F	Os
Limit problems of human existence: suicide, assisted suicide, euthanasia	D	seminar: 30	2,0	graded credit	F	Os
Cultural psychology in the context of health and illness issues.	D	seminar: 30	2,0	graded credit	F	Os
Body’s circadian rhythm in health and diseases	D	seminar: 30	2,0	graded credit	F	Os
Business plan and marketing communication	D	classes: 20 lecture: 10	2,0	graded credit	F	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Management and decision making	D	seminar: 20 classes: 10	2,0	graded credit	F	Os
Medical Writing	D	seminar: 15 lecture: 15	2,0	graded credit	F	Os
Disability and independent living. The social dimension.	D	classes: 20 lecture: 10	2,0	graded credit	F	Os
Ethical aspects of interpersonal communication in medicine	D	e-learning: 10 seminar: 20	2,0	graded credit	F	Os

Semestr 7

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Anesthesiology and Intensive Care	F	seminar: 13 classes: 15	3,0	credit	O	Or
Surgery	F	simulations: 12 seminar: 8 classes: 44 lecture: 24	5,0	credit	O	Or
Internal Medicine	E, B, C	e-learning: 2 seminar: 42 classes: 61	8,0	credit	O	Or
Clinical Genetics	E	lecture: 24	2,0	graded credit	O	Os
Obstetrics and Gynecology	F, B	seminar: 20 classes: 20	3,0	credit	O	Or
Clinical Immunology	E	seminar: 10 classes: 8	1,0	examination	O	Os
Evidence-Based Medicine	D	seminar: 27 classes: 9	2,0	examination	O	Os
Otorhinolaryngology	F	seminar: 10 classes: 40	3,0	examination	O	Os
Nuclear Medicine	E	seminar: 12	1,0	graded credit	O	Os
Occupational Medicine	E	e-learning: 3 seminar: 8 classes: 4 lecture: 3	1,0	graded credit	O	Os
Family Medicine	E	e-learning: 18 seminar: 17 classes: 15	3,0	credit	O	Or
Neurology	E, C	seminar: 34 classes: 46 lecture: 10	7,0	examination	O	Os
Ophthalmology	F	classes: 40 lecture: 20	4,0	examination	O	Os
Pediatrics	E	seminar: 26 classes: 32	4,0	credit	O	Or

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Medical Law and Medical Deontology	G	seminar: 25	2,0	graded credit	O	Os
Propedeutics of Dentistry	F	seminar: 15	1,0	graded credit	O	Os
Psychotherapy	E	seminar: 6 classes: 14	1,0	graded credit	O	Os
Public Health	G	seminar: 15	1,0	graded credit	O	Os
Medical Polish	D	foreign language course: 30	-	-	O	Os

Semestr 8

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Anesthesiology and Intensive Care	F	seminar: 13 classes: 15	3,0	credit	O	Or
Surgery	F	simulations: 12 seminar: 8 classes: 44 lecture: 24	5,0	credit	O	Or
Internal Medicine	E, B, C	e-learning: 2 seminar: 42 classes: 61	8,0	credit	O	Or
Clinical Genetics	E	lecture: 24	2,0	graded credit	O	Os
Obstetrics and Gynecology	F, B	seminar: 20 classes: 20	3,0	credit	O	Or
Clinical Immunology	E	seminar: 10 classes: 8	1,0	examination	O	Os
Evidence-Based Medicine	D	seminar: 27 classes: 9	2,0	examination	O	Os
Laboratory Training of Clinical Skills	E, F	classes: 32	1,0	credit	O	Or
Otorhinolaryngology	F	seminar: 10 classes: 40	3,0	examination	O	Os
Nuclear Medicine	E	seminar: 12	1,0	graded credit	O	Os
Occupational Medicine	E	e-learning: 3 seminar: 8 classes: 4 lecture: 3	1,0	graded credit	O	Os
Family Medicine	E	e-learning: 18 seminar: 17 classes: 15	3,0	credit	O	Or
Neurology	E, C	seminar: 34 classes: 46 lecture: 10	7,0	examination	O	Os
Ophthalmology	F	classes: 40 lecture: 20	4,0	examination	O	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Pediatrics	E	seminar: 26 classes: 32	4,0	credit	O	Or
Medical Law and Medical Deontology	G	seminar: 25	2,0	graded credit	O	Os
Propedeutics of Dentistry	F	seminar: 15	1,0	graded credit	O	Os
Psychotherapy	E	seminar: 6 classes: 14	1,0	graded credit	O	Os
Public Health	G	seminar: 15	1,0	graded credit	O	Os
Medical Polish	D	foreign language course: 30	4,0	examination	O	Os
Surgery - summer clerkship	I	professional practice: 60	2,0	credit	O	Os
Pediatrics - summer clerkship	I	professional practice: 60	2,0	credit	O	Os

Semestr 9

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Anesthesiology and Intensive Care	F, B, C	seminar: 8 classes: 19 lecture: 8	2,0	examination	O	Os
Surgery	F, B, C	seminar: 33 classes: 42 lecture: 6	5,0	credit	O	Or
Internal Medicine	E, C	seminar: 35 classes: 77	7,0	credit	O	Or
Clinical Pharmacology	E	seminar: 12	1,0	graded credit	O	Os
Infectious Diseases	E, C	seminar: 27 classes: 17 lecture: 26	4,0	examination	O	Os
Geriatrics and Palliative Medicine	E, B	seminar: 25 classes: 25	3,0	examination	O	Os
Obstetrics and Gynecology	F, C	seminar: 45 classes: 35	4,0	credit	O	Or
Laboratory Training of Clinical Skills	E, F	simulations: 22 e-learning: 22	1,0	graded credit	O	Os
Emergency Medicine	F	simulations: 25 lecture: 4	2,0	credit	O	Or
Forensic Medicine	G	seminar: 32 classes: 10 lecture: 8	3,0	examination	O	Os
Oncology and Hematology	E	seminar: 18 classes: 32 lecture: 6	3,0	graded credit	O	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Orthopedics and Traumatology	F	seminar: 25 classes: 25 lecture: 7	4,0	examination	O	Os
Pediatrics	E, C	simulations: 18 seminar: 39 classes: 35	6,0	credit	O	Or
Psychiatry	E	classes: 55 lecture: 20	5,0	credit	O	Or
Rehabilitation	F	seminar: 2 classes: 13 lecture: 2	1,0	graded credit	O	Os
Workshop of Clinical Psychological Skills	D	simulations: 20	1,0	graded credit	O	Os
NON-SURGICAL SCIENCES	E				O	Os
Individual methods of treatment of mental disorders in children and adolescents in biopsychosocial context (personalized psychiatry)	E	seminar: 30	2,0	graded credit	F	Os
Self-inflicted injury and suicidal behavior among children and adolescents	E	seminar: 30	2,0	graded credit	F	Os
Why teenagers scare their parents? (about suicides, self-inflicted injuries, using drugs and risky sexual behavior)	E	classes: 20 lecture: 10	2,0	graded credit	F	Os
Foundations of psychoanalysis	E	seminar: 16 classes: 14	2,0	graded credit	F	Os
Clinical Immunology as modern interdisciplinary science	E	seminar: 14 classes: 16	2,0	graded credit	F	Os
How to survive in emergency care - what the doctor should know	E	seminar: 30	2,0	graded credit	F	Os
Heart failure: prevention, diagnostics and treatment	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Advanced technologies in treatment of diabetes	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
From symptoms to diagnosis - topographic diagnostics in Neurology	E	seminar: 30	2,0	graded credit	F	Os
Practice of echocardiography	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
The role of genetics in modern prenatal diagnosis and in reproduction failure	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Systemic vasculitis	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Ultrasound in pediatrics	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
From conservative nephrology to transplantology	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Emergency in allergology and clinical immunology	E	classes: 17 seminar: 13	2,0	graded credit	F	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Nervous system diseases in children and neurophysiology methods in diagnostics	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
SURGICAL CLINICAL SCIENCES	F				O	Os
Advanced Life Support	F	e-learning: 9 classes: 20 lecture: 1	2,0	graded credit	F	Os
Practical aspects of surgery in children	F	seminar: 8 classes: 16 lecture: 6	2,0	graded credit	F	Os
Treatment of cancer of the abdominal cavity in elderly people	F	seminar: 6 classes: 20 lecture: 4	2,0	graded credit	F	Os
Videoscope technique in surgical fields	F	seminar: 10 classes: 20	2,0	graded credit	F	Os
Minimally invasive techniques in urology	F	classes: 20 seminar: 10	2,0	graded credit	F	Os

Semestr 10

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Anesthesiology and Intensive Care	F, B, C	seminar: 8 classes: 19 lecture: 8	2,0	examination	O	Os
Surgery	F, B, C	seminar: 33 classes: 42 lecture: 6	5,0	credit	O	Or
Internal Medicine	E, C	seminar: 35 classes: 77	7,0	credit	O	Or
Clinical Pharmacology	E	seminar: 12	1,0	graded credit	O	Os
Infectious Diseases	E, C	seminar: 27 classes: 17 lecture: 26	4,0	examination	O	Os
Geriatrics and Palliative Medicine	E, B	seminar: 25 classes: 25	3,0	examination	O	Os
Obstetrics and Gynecology	F, C	seminar: 45 classes: 35	4,0	credit	O	Or
Laboratory Training of Clinical Skills	E, F	simulations: 22 e-learning: 22	1,0	graded credit	O	Os
Emergency Medicine	F	simulations: 25 lecture: 4	2,0	credit	O	Or
Forensic Medicine	G	seminar: 32 classes: 10 lecture: 8	3,0	examination	O	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Oncology and Hematology	E	seminar: 18 classes: 32 lecture: 6	3,0	graded credit	O	Os
Orthopedics and Traumatology	F	seminar: 25 classes: 25 lecture: 7	4,0	examination	O	Os
Pediatrics	E, C	simulations: 18 seminar: 39 classes: 35	6,0	credit	O	Or
Psychiatry	E	classes: 55 lecture: 20	5,0	credit	O	Or
Rehabilitation	F	seminar: 2 classes: 13 lecture: 2	1,0	graded credit	O	Os
Workshop of Clinical Psychological Skills	D	simulations: 20	1,0	graded credit	O	Os
Anesthesiology and Intensive Care - summer clerkship	I	professional practice: 60	2,0	credit	O	Os
Obstetrics and Gynecology - summer clerkship	I	professional practice: 60	2,0	credit	O	Os
NON-SURGICAL SCIENCES	E				O	Os
Individual methods of treatment of mental disorders in children and adolescents in biopsychosocial context (personalized psychiatry)	E	seminar: 30	2,0	graded credit	F	Os
Self-inflicted injury and suicidal behavior among children and adolescents	E	seminar: 30	2,0	graded credit	F	Os
Why teenagers scare their parents? (about suicides, self-inflicted injuries, using drugs and risky sexual behavior)	E	classes: 20 lecture: 10	2,0	graded credit	F	Os
Foundations of psychoanalysis	E	seminar: 16 classes: 14	2,0	graded credit	F	Os
Clinical Immunology as modern interdisciplinary science	E	seminar: 14 classes: 16	2,0	graded credit	F	Os
How to survive in emergency care - what the doctor should know	E	seminar: 30	2,0	graded credit	F	Os
Heart failure: prevention, diagnostics and treatment	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Advanced technologies in treatment of diabetes	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
From symptoms to diagnosis - topographic diagnostics in Neurology	E	seminar: 30	2,0	graded credit	F	Os
Practice of echocardiography	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
The role of genetics in modern prenatal diagnosis and in reproduction failure	E	seminar: 10 classes: 20	2,0	graded credit	F	Os

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Systemic vasculitis	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Ultrasound in pediatrics	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
From conservative nephrology to transplantology	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Nervous system diseases in children and neurophysiology methods in diagnostics	E	seminar: 10 classes: 20	2,0	graded credit	F	Os
Emergency in allergology and clinical immunology	E	classes: 17 seminar: 13	2,0	graded credit	F	Os
SURGICAL CLINICAL SCIENCES	F				O	Os
Advanced Life Support	F	e-learning: 9 classes: 20 lecture: 1	2,0	graded credit	F	Os
Practical aspects of surgery in children	F	seminar: 8 classes: 16 lecture: 6	2,0	graded credit	F	Os
Videoscope technique in surgical fields	F	seminar: 10 classes: 20	2,0	graded credit	F	Os
Treatment of cancer of the abdominal cavity in elderly people	F	seminar: 6 classes: 20 lecture: 4	2,0	graded credit	F	Os
Minimally invasive techniques in urology	F	classes: 20 seminar: 10	2,0	graded credit	F	Os

Semestr 11

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Surgery	H	clinical classes: 120	8,0	examination	O	Os
Internal Medicine	H	clinical classes: 240	16,0	examination	O	Os
Obstetrics and Gynecology	H	clinical classes: 60	4,0	examination	O	Os
Pediatrics	H	simulations: 6 clinical classes: 114	8,0	examination	O	Os
Psychiatry	H	clinical classes: 60	4,0	examination	O	Os
Emergency Medicine	H	simulations: 6 clinical classes: 54	4,0	examination	O	Os
Family Medicine	H	clinical classes: 60	4,0	examination	O	Os
Clinical Science Electives	H	clinical classes: 180	12,0	credit	O	Os

Semestr 12

Przedmiot	Grupa standardu	Liczba godzin	Punkty ECTS	Forma weryfikacji		
Surgery	H	clinical classes: 120	8,0	examination	O	Os
Internal Medicine	H	clinical classes: 240	16,0	examination	O	Os
Obstetrics and Gynecology	H	clinical classes: 60	4,0	examination	O	Os
Pediatrics	H	simulations: 6 clinical classes: 114	8,0	examination	O	Os
Psychiatry	H	clinical classes: 60	4,0	examination	O	Os
Emergency Medicine	H	simulations: 6 clinical classes: 54	4,0	examination	O	Os
Family Medicine	H	clinical classes: 60	4,0	examination	O	Os
Clinical Science Electives	H	clinical classes: 180	12,0	credit	O	Os

O - obligatory
F - elective
Or - obligatory for passing a year
Os - obligatory for passing in the course of studies