

Informacje ogólne o kierunku studiów

Nazwa kierunku studiów	FARMACJA– English Division
Poziom kształcenia	jednolite studia magisterskie
Liczba semestrów i liczba punktów ECTS konieczna do ukończenia studiów na danym poziomie	11, 330 ECTS
Profil kształcenia	ogólnoakademicki
Formy studiów	stacjonarne i niestacjonarne
Tytuł zawodowy uzyskany przez absolwenta	magister farmacji
Poziom Polskiej Ramy Kwalifikacji	VII

General information about the field of study

Name of field of study	PHARMACY– English Division
The level of education	Uniform Master's studies
The number of semesters and the number of ECTS points necessary to complete studies at a given level	11; 330 ECTS
Education profile	Generally academic
Forms of study	Full-time
Professional title obtained by the graduate	magister farmacji
Polish Qualifications Framework level	VII

Kierunek - farmacja ED
poziom studiów - jednolite studia magisterskie
cykl kształcenia 2019-2025
rok akademicki 2019/2020

Module / Subject	ECTS	Total number of hours	semester 1						semester 2*						Manner of obtaining credit	Course content	Symbols of learning outcomes
			Number of hours						Number of hours								
			lectures	seminars	exercise	laboratories	practical training	self-study	lectures	seminars	exercise	laboratories	practical training	self-study			
Anatomy	5	30	15		15										Credit with grade	Structure and topography of human organs and their role and belonging to the functional systems: musculo-skeletal, circulatory, nervous, respiratory, digestive and urogenital.	B.K3., A.U4., A.W4.,
Basic Polish I	2	60								60					Credit	Greeting, introducing, numbers, personal information, nationalities, professions, family members, verbs (hobbies, routines - present forms), food and drinks, transport, days of the week, colours, adjectives (shape, size, quality), time expressions.	E.U55., B.K3.
Biology and genetics	8	60	15		45										Exam	Included: basic biology and taxonomy; basic cell biology; basic genetics; basic animal and plant cytology/histology; and parasitology	A.U12., A.U2., A.U20., A.W10., A.W11., A.W15., A.W17., A.W2., A.W3., B.K2., B.K3., C.W12., D.U10., D.W1.
Biophysics	4	30								30					Credit with grade	Basic measurements of biophysical parameters vital for medicine and pharmacy. Presentation of problems giving deeper insight into physical basis of experimental methods	A.W30., B.K2., B.K3., B.U1., B.U14., B.U2., B.W1., B.W2., B.W23., B.W3.
General and inorganic chemistry	14	150						50		100					Exam	Structure of matter, elementary particles, chemical laws, properties of elements and chemicals. Basic laboratory techniques, calculations and qualitative analysis.	B.K1., B.K2., B.K3., B.U4., B.U5., B.U6., B.U8., B.W10., B.W11., B.W7., B.W8., B.W9., F.U3., F.U4., F.U6., F.W1., F.W2.,
History of pharmacy	1	15	15												Credit with grade	History of the pharmacy from the antiquity to the present; history of the pharmacist profession, history of the selected drug discoveries; historical causes of the separation between the vocation of a physician and pharmacists.	A.W27., E.W45., E.W46., E.U23., E.U24., A.K1.
History of philosophy	1	15							15						Credit	Development of philosophical problems, methods of practicing philosophy, philosophical views, trends (currents), schools, systems and philosophical faculties over the centuries.	A.W27., E.W53., E.W55., E.U25., E.U26., E.U27., E.U54., A.K1., B.K1., B.K2., B.K3., E.W49., B.U17.
Information technology	1	15			15										Credit with grade	E-learning. Text edition - printing, formatting, editing publication. Using tables, formulas, charts, diagrams. Excel - calculations and graphs. Making presentation in Power Point.	B.W26., B.U15., B.U16., B.K1.
Latin language classes	3	60								60					Credit with grade	Selected topics from botany, pharmacology, chemistry. Latin pharmaceutical terminology, prescriptions, abbreviations. Anatomy, body systems, diseases. Medical wordbuilding using Latin and Greek prefixes and suffixes. Latin proverbs.	B.K3., C.U27.
Library training online		2	2												Credit	Presentation of the Library regulations and the rules of using Library resources and services, mostly the ways of searching for and ordering literature needed during the studies.	B.W27., E.W18., B.K1.
Mathematics	2	40			40										Credit with grade	The student know basic elementary functions, the concept of inverse, complex, diverse, monotonic, even, and odd functions as well as one-to-one function. Elements of differential and integral calculus and first-order differential equations.	B.W23., B.U11., B.U12., B.K3.

Organic chemistry	3	40								40						Credit	Classification of organic compounds by presence of specified functional group. Introduction to nomenclature, structure, chemical and physical properties, analysis of several classes of monofunctional compounds.	B.W8., B.W6., B.W22., B.W20., B.W19., B.W18., B.W17.
Psychology and sociology	1	15		15												Credit with grade	The classes will discuss the main psychological trends and the most important sociological concepts in relation to selected health and illness problems.	A.W28., A.W29., A.W30., A.W31., A.W32., A.U22., A.K2.
Safety and Good Work Practice		4	4													Credit	Lectures during safety training, students learn about the risk factors in the environment (biological, chemical, physical) accidents and potentially by accident situations, the issues of fire protection and first aid techniques	A.W26., B.W10., B.W2., C.W32., D.W26., D.W29., D.W30., D.W33., E.W44., A.U21., C.U6., A.K3., B.K1., B.K2.
Statistics	2	45								45						Credit with grade	Student acquires skills needed to describe real-life natural processes in mathematical and statistical terms; use statistical methods and models in medical sciences.	B.U13., B.U14., B.U15., B.U16., B.K2., B.K3., B.U17., B.W24., B.W25.
Elective subjects	2	30														Credit		

* the number of hours assigned to the summer semester may include classes available throughout the year or in the block system

Module / Subject	ECTS	Total number of hours	semester 3						semester 4*						Manner of obtaining credit	Course content	Symbols of learning outcomes
			Number of hours						Number of hours								
			lectures	seminars	exercise	laboratories	practical training	self-study	lectures	seminars	exercise	laboratories	practical training	self-study			
Analytical chemistry	12	180						45	15	120					Exam	Characteristics of chemical and instrumental analytical methods. Validation of analytical methods. Calculations in chemical analysis.	B.K2.,B.K3.,B.U13.,B.U14.,B.U7.,B.U8.,B.W12.,B.W13.,B.W14.,B.W7.B.W8
Basic Polish II	2	60									60				Credit with grade	Upgrading communicative skills, vocabulary and grammar to interact effectively in everyday situations (with cultural background). Verbs - present and past forms. Basic medical and pharmaceutical terms (anatomy, hospital setting, medications).	B.K3., E.U55.
Biochemistry	10	105						45		60					Exam	Proteins, enzymes, bioenergetics and oxidative phosphorylation, metabolism of carbohydrates, lipids and nitrogen compounds, cholesterol metabolism, detoxification, cell signaling.	A.U10.,A.U12.,A.U8.,A.U9.,A.W10.,A.W11.,A.W12.,A.W9.,B.K2.,B.K3.,B.U13.,B.W8.,C.W1.,D.U25.,D.U30.,D.W17.,F.U4.,
Molecular biology	3	30	10	10	10										Credit with grade	DNA replication, mutation and repair, transcription, translation, protein folding, regulation of gene expression, cell cycle, apoptosis, cancer transformation, genetic engineering	A.U12.,A.U13.,A.U14.,A.W11.,A.W15.,A.W16.,A.W17.,A.W23.,B.K2.,B.K3.,B.W2.,C.W13.,C.W15.,F.U1.,F.U4.,
Organic chemistry	12	170						30	10	130					Exam	Student gets acquainted with the main concepts and rules of organic chemistry, organic compounds classification, structure and its correlation with physical and chemical properties, methods of synthesis and analysis.	A.W9.B.K1.,B.K2.,B.K3.,B.U10.,B.W17.,B.W18.,B.W19.,B.W20.,B.W21.,B.W22.,B.W8.,C.W11.,C.W38.,F.U4.,
Pharmaceutical chemistry	3	50						20		30					Credit	Drug substances in the ATC system. Structure-activity of drugs (QSAR). Analytical quality control of drugs according to the Polish and European Pharmacopoeia. Physicochemical and metabolic stability of drugs.	A.W12.,B.K1.B.K2.,B.K3.,B.U5.,B.W10.,B.W12.,B.W13.,B.W14.,C.U1.,C.U17.,C.U18.,C.U38.,C.W1.,C.W3.,C.W6.,C.W8.,D.U11.,D.W12.,D.W13.,D.W16.,D.W17.,E.W45.,F.U3.,F.U4.,
Physical chemistry	10	105	45		60										Exam	Thermodynamics; Phase systems; Surface phenomena and dispersion systems; Electrochemistry; Kinetics and pharmacokinetics; Quantum mechanics;	A.K2.,A.K3.,A.W7.,B.U13.,B.U9.,B.W15.,B.W16.B.W16.,
Physiology	6	75	30		45										Exam	The objective of the course is to make students aware of physiological mechanisms securing normal function of the human organism, especially regulation processes and the involved structures and chemical agents.	A.K2.,A.U1.,A.U11.,A.U5.,A.W1.,A.W11.,A.W13.,A.W14.,A.W31.,A.W4.,A.W5.,A.W6.,B.K2.,B.K3.,B.W1.,B.W2.,
Elective subjects	2	30													Credit		

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