

## Course description

### Part 1

General information about the course		
1. Major of study: Pharmacy		2. Study level: long -cycle master's studies
4. Year: V		3. Form of study: full-time
		5. Semester: IX
6. Course name: Pharmaceutical care		
7. Course status: obligatory		
8. Course contents and assigned study effects		
Getting to know the definition and rules of pharmaceutical care for patients in various disease entities.		
Learning effects/ reference to the learning effects included in the standards		
in range of knowledge, the student knows and understands: E.W6, E.W7, E.W8, E.W9, E.W10, E.W11, E.W12, E.W13, E.W14, E.W15, E.W17, E.W24, E.W30;		
in range of skills student is able to: E.U5, E.U6, E.U7, E.U8, E.U9, E.U10, E.U11, E.U12, E.U14, E.U15, E.U16, E.U17, E.U18, E.U23, E.U25, E.U31;		
in range of social competences, the student is ready to: establishing a relationship with the patient and colleagues based on mutual trust and respect; implementing 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; compliance with the confidentiality of health, patient's rights and the principles of professional ethics; promoting pro-health behavior; use of objective sources of information; formulating conclusions from own measurements or observations; accepting responsibility for decisions made in the course of professional activity, including in terms of one's own safety and that of others.		
9. Number of hours for the course:		105
10. Number of ECTS points for the course:		7
11. Ways of verification and assessment of learning effects		
Learn effects	Ways of verification	Ways of assessment
In range of knowledge	Final grade - selection test and open questions	*
In range of skills	Report Observation Practical exam	*
In range of competences	Observation	*
* it is assumed that the rating means on the level:		
Very good (5,0) - the assumed learning effects have been achieved and significantly exceed the required level		
Good plus (4,5) - the assumed learning effects have been achieved and slightly exceed the required level		
Good (4,0) – the assumed learning effects have been achieved on the required level		
Satisfactory plus (3,5) – the assumed learning effects have been achieved on the average required level		
Satisfactory (3,0) - the assumed learning effects have been achieved at the minimum required level		
Unsatisfactory (2,0) – the assumed learning effects not have been achieved		

## Course description

### Part 2

Other useful information about the course		
<b>12. Name of Department, mailing address, e-mail:</b> Department of Community Pharmacy Faculty of Pharmaceutical Sciences in Sosnowiec Medical University of Silesia in Katowice farmacja_apteczna@sum.edu.pl		
<b>13. Name and surname of the person responsible for the completion of the course:</b> professor Paweł Olczyk; e-mail: polczyk@sum.edu.pl		
<b>14. Prerequisites for knowledge, skills and other competences:</b> Subjects: Anatomy, Physiology, Pathophysiology, Pharmacokinetics, Pharmacognosy, Pharmacology, Toxicology. Knowledge and skills: knowledge of medicinal products, medical devices and dietary supplements		
<b>15. Number of students in the group</b>	In accordance with the resolution of the Senate of SUM	
<b>16. Materials for the classes</b>	Examples of medical prescriptions, leaflets of medicinal products, medical devices, e.g. insulin pens, glucose tests, inhalation and powder inhalers, blood pressure monitors	
<b>17. Place of the classes</b>	Department of Community Pharmacy, Faculty of Pharmaceutical Sciences in Sosnowiec , Kasztanowa 3, 41-209 Sosnowiec	
<b>18. Place and time of consultation</b>	Department of Community Pharmacy, Faculty of Pharmaceutical Sciences in Sosnowiec, Kasztanowa 3, 41-209 Sosnowiec, the hour of consultation is determined on the first exercises	
19. Learn effects		
Learning outcome number	Learning outcome number	Learning outcome number
P_W01	Student knows and understands the idea of pharmaceutical care, knows the rules of conducting medical interviews used to detect, classify and solve drug problems, as well as the systems of classification of drug problems used in the world, knows the tools and principles of documenting pharmaceutical care.	E.W6 E.W7 E.W8
P_W02	Student knows and understands the legal basis of pharmaceutical care in the Polish health system, knows and understands the principles of monitoring the effectiveness and safety of pharmacotherapy of an individual patient in the process of pharmaceutical care, as well as tools to help detect drug problems.	E.W9 E.W11 E.W12
P_W03	Student knows and understands the principles of determining the patient's drug needs, conducts an interview with the patient in order to gather information necessary to implement and conduct pharmaceutical care. Knows and understands the principles of individualization of pharmacotherapy, considering the differences in the action of drugs caused by physiological factors in disease states.	E.W10 E.W13 E.W14

P_W04	Student knows and understands the causes of occurrence and methods of preventing and reducing the incidence of adverse drug reactions. Student knows the basic sources of information about the drug (books, magazines, databases). Student knows the issues of modern pharmacotherapy of selected civilization diseases and diseases requiring chronic treatment, based on the principles of medical procedure known as evidence-based medicine, therapeutic standards and guidelines of Polish and European medical societies.	E.W15 E.W17 E.W24 E.W30
P_U01	Interviews the patient to gather information necessary to implement and lead pharmaceutical care. Uses printed and electronic pharmaceutical care documentation tools	E.U6 E.U10 E.U15
P_U02	Applies the Code of Ethics of the Pharmacist; prepares a pharmaceutical care plan including setting the goals of therapy and indicating activities enabling their implementation.	E.U5 E.U7 E.U9 E.U23 E.U31
P_U03	Identifies and differentiates the scope of health information necessary in the process of pharmaceutical care for patients with various chronic diseases. Detects and classifies drug problems and proposes a way to solve them. It determines the patient's drug needs and assesses the degree of their satisfaction based on the analysis of the obtained information, predicts the influence of various factors on the pharmacokinetic and pharmacodynamic properties of drugs, and solves problems related to the individualization and optimization of pharmacotherapy.	E.U8 E.U11 E.U12 E.U14 E.U16 E.U25
P_U04	Prepare a patient education plan to solve drug problems. Initially assesses the cause and effect relationship between the drug used and the observed reaction. It actively monitors and reports adverse drug reactions, implements preventive measures, and provides information related to complications of pharmacotherapy to healthcare professionals, patients or their families.	E.U17 E.U18

20. Forms and topics of classes	Number of hours
<b>21.1. Talks</b>	<b>30</b>
1. Pharmaceutical care in menopause and andropause	4
2. Pharmaceutical care for patients with dermatological diseases	4
3. Pharmaceutical care in depression and insomnia	4
4. Pharmaceutical care in autoimmune diseases	4
5. Pharmaceutical care in eye diseases	4
6. Pharmaceutical care in diseases of the musculoskeletal system	4
7. Pharmaceutical care in diseases of the urinary system	4
8. Pharmaceutical care in diseases of the hearing organ	2

<b>23.2. Practice</b>	<b>30</b>
1. Pharmaceutical care, goals and tasks, rules of medical reconnaissance for detecting, classifying and solving drug problems, classification systems for drug problems	5
2. Pharmaceutical care and practical introduction of the principles of interpersonal communication, rules of using the pharmacy computer system for the implementation of prescriptions and detection of drug interactions in diabetes	5
3. Pharmaceutical care and practical introduction of the principles of interpersonal communication, rules of using the pharmacy computer system for the implementation of prescriptions and the detection of drug interactions in asthma	5
4. Pharmaceutical care in diseases selected by the student, presentation in the form of a multimedia case study, workshop classes in the expedition room	5
5. Pharmaceutical care in hypertension, solving drug problems, workshops in the use of blood pressure monitors distributed in the pharmacy and the practical implementation of prescriptions	5
6. Pharmaceutical care in pregnancy and pediatrics, solving drug problems, practical realization of prescriptions, passing a test	5
<b>23.3. Seminars</b>	<b>45</b>
1. Pharmaceutical care and practical introduction of communication rules interpersonal, rules of using the pharmacy computer system in the field of prescription processing and detection of drug interactions in ophthalmology; types of eye drops and the correct technique of administering eye drops	6
2. Pharmaceutical care and practical introduction of the rules of interpersonal communication, rules of using the pharmacy computer system for the implementation of prescriptions and the detection of drug interactions in skin diseases	6
3. Pharmaceutical care and practical implementation of the rules of interpersonal communication, rules of using the pharmacy computer system for the implementation of prescriptions and the detection of drug interactions in infectious diseases	6
4. Pharmaceutical care and practical introduction of the rules of interpersonal communication, rules of using the pharmacy computer system in the field of prescription fulfillment and detection of drug interactions in patients with chronic pain	6
5. Pharmaceutical care and practical introduction of the rules of interpersonal communication, rules of using the pharmacy computer system for the implementation of prescriptions and the detection of drug interactions in kidney diseases	6
6. Pharmaceutical care and practical introduction of the rules of interpersonal communication, rules of using the pharmacy computer system for the implementation of prescriptions and the detection of drug interactions in cardiovascular diseases	6
7. Pharmaceutical care - interactions with OTC drugs and food	6
8. Pharmaceutical care for patients using natural medicines	3
<b>24. Readings</b>	

**24.1. Basic readings**

1. Pharmaceutical care: symptoms, diagnosis and treatment, P. Rutter i wsp. Wrocław 2006
2. Practical pharmacy , R. Jachowicz et al., second edition, PZWL Warszawa 2016
3. Conducting pharmaceutical care and solving drug problems on selected examples.. S. Polak et al. Scientific Library of the Pharmacy Journal, Warsaw 2010

**24.2. Supplementary readings**

1. The Scientific Library of the Pharmacy Journal - a series of books devoted to pharmaceutical care

**25. Detail evaluation criteria**

In accordance with the recommendations of the inspection bodies

Completion of the course – student has achieved the assumed learning outcomes

Detail criteria for completion and evaluation of the course are specified in the course regulations