Name of the discipline	**Drug control**			
Type	compulsory		Credits	5
Year of study	V		semester	IX
Number of hours	course	26	Practical/laboratory work	52
	SEMINARS		Individual work	72
compound	Specialized			
Course holder	Dr. habilitated in pharmaceutical sciences, university professor Valica Vladimir			
location	Malina Mica, 66			
Prerequisites and requirements of:	Program: Pharmaceutical chemistry is a science with multidisciplinary prerequisites, combining knowledge of inorganic, organic, analytical chemistry, physical-colloidal chemistry, previously accumulated physical-chemical analysis methods , and founding other specialized disciplines such as pharmaceutical technology, pharmacology and pharmacognosy, medicinal chemistry.			
	Skills: Knowledge of chemical structures; skills in working with laboratory glassware and equipment; chemical and physico-chemical analysis techniques; compliance with safety techniques in the chemical laboratory; basic digital skills (using the internet, processing documents, using text editors, spreadsheets and presentation applications), communication and teamwork skills.			
The mission of the discipline	The mission of the discipline Drug control is the formation of the methodology and strategy for drug analysis and control in accordance with the trends of continuous optimization of analysis and control methods and in accordance with general analytical strategies, to ensure the scientific and practical foundations of drug analysis and control. The discipline provides students with knowledge of the concepts of drug quality control, as well as the development of skills in understanding the procedures, methods of drug analysis and quality control, which ensure their effectiveness and harmlessness, for qualitative pharmaceutical care of patients.			
The topic presented	Drug quality, objectives and problems. Organization of drug control in the Republic of Moldova. Current national and international norms regarding drug quality. Drug stability. Drug degradation by various mechanisms . Shelf life. Ways to solve instability problems. General problems of drug analysis and control. General methodology of analysis and control. Stages of drug analysis and control. Sampling for drug analysis and control . Organoleptic control. Determination of physical, chemical and physico-chemical properties. Chemical methods in drug analysis and control. Determination of identity, purity and dosage of drugs by chemical methods. Instrumental methods in drug control. Determination of identity, purity and dosage of drugs by physico-chemical methods. Standardization of drugs. Normative analytical documents regulating the quality of drugs. Standardization and quality control of medicines. Counterfeiting of medicines: analytical and control aspects.			
Study purposes	• have the ability and willingness to analyze drugs using chemical, physico-chemical and biological methods in accordance with the requirements of the Pharmacopoeia (Ph. Eur.); • have the ability and capacity to evaluate and interpret the			

	results of drug analysis ; • be able to prepare reagents for drug analysis in accordance with the requirements of the Pharmacopoeia (Ph. Eur.); • have the ability and willingness to determine the physicochemical characteristics of pharmaceutical forms, including tablets, ointments, injectable solutions and others. • to know the types of control required in the analysis of master forms and to record the results of the control; • be able to carry out quality control of medicines according to quality standards; • have the ability and willingness to provide advice to medical workers and consumers of medicines and other pharmaceutical products in accordance with the rules on the storage of medicines and other pharmaceutical products, taking into account their physicochemical properties; • to be able to work with scientific literature, to be able to search for scientific information, to analyze the information obtained, to transform the information found into a tool for solving professional problems.
Purchased practical skills	• assessing drug stability and selecting storage procedures; • taking samples for analysis; • performing chemical, physical and physico-chemical analyses; • determining the identity of drugs through various pharmacopoeial and alternative methods; • determining the degree of purity of medicines; • dosing of pharmaceutical substances and dosage forms by chemical and physico-chemical methods; • analysis of pharmaceutical excipients and packaging materials; • knowledge and application of the requirements of regulatory acts in the field of drug analysis and control; • possession of a computer as a working tool in theoretical and practical activity; • establishing the correlation between the components of the analyst's activity process.
Evaluation form	Exam at the end of the semester.