# Procedure Regulating the Development and Revision of the Working Program of Academic Discipline

### **1. GENERAL PROVISIONS**

1.1. The procedure of developing the working program of academic discipline (hereinafter - the Procedure) was developed in accordance with the Law of Ukraine "On Higher Education"  $N_{2}$  56 1556 - VII of July 1, 2014, "Regulations on the organization of the educational process at Lviv Polytechnic National University  $N_{2}$  235-10 of 10.12.2015, Regulations on accreditation of educational programs for the training of applicants for higher education, approved by the Order of the Ministry of Education and Science of Ukraine of July 11, 2019  $N_{2}$  977 and other regulations of the University.

1.2. The purpose of the Procedure is to standardize the content, scope, sequence and organizational forms of leaarning the discipline by the students, as well as to define the forms of current and final control, learning outcomes and criteria for their evaluation.

1.3. The basic documents for the development of the working program of the academic discipline (hereinafter - WPAD) are the educational program and the curriculum. WPAD is developed for the whole academic year.

1.4. A single WPAD indicating the number of classroom hours, hours allotted for independent and individual work, the forms of control, etc. is developed for different forms of education (both full-time and part-time).

1.5. A sample of the WPAD design is provided in the Appendix.

1.6. Simultaneously with the creation of WPAD, the teacher (course compiler) is obliged to complete the syllabus (the description) of the educational component which is posted on the official website of the University, is freely available for different groups of stakeholders and contains an annotation of the academic discipline. The Ukrainian and English variants of educational components syllabi are allocated in the information system of the University https://is.lpnu.ua, section "Descriptions of disciplines".

# 2. STRUCTURE AND CONTENT OF THE WORKING PROGRAM OF ACADEMIC DISCIPLINE

2.1. WPAD contains a title page, a page providing information about its developers and authorized approvals. It also includes the following sections: structure of the discipline; purpose and objectives of the discipline; annotation of the discipline; description of the discipline; description of methods to assess the level of students' achievement; criteria for evaluating the learning outcomes; studying resources; references; information resources; academic integrity policy; unified appendix; changes and supplements to the working program of the academic discipline.

2.2. Section 1 "Structure of the discipline" contains general information about the discipline, in particular: the number of ECTS credits; the total number of classroom hours and their types (lectures, seminars, practical classes, laboratory works); the total number of independent work hours, including the number of tests, projects, calculation and graphic assignments and individual research tasks (presentations, abstracts, reports, etc.) and hours for their preparation; the type of final control (exam or test); the percentage of classroom hours of the total number of hours of the discipline.

2.3. Chapter 2 "Purpose and objectives of the discipline" defines the purpose, objectives and program learning outcomes in accordance with the content of the discipline.

2.3.1. The purpose of the discipline is defined as the desired student's achievements resulted from the completion of the course.

2.3.2. The objectives of the discipline are defined as the contribution of the discipline to the formation of students' necessary general and professional competencies, taking into account the compliance of program competencies matrix with the components of the educational program.

2.3.3. Program studying outcomes (PSO) are defined as a list of knowledge and skills that a student must acquire based on the results of studying, taking into account the matrix of PSO compliance with the educational components of the educational program.

Teaching and learning methods must realistically ensure the achievement of the PSO.

Methods for assessing the level of PSO achievement should correlate with section 5 ("Description of methods for knowledge diagnosing " WPAD).

2.3.4. Subsection 2.4 contains a list of previous courses necessary for the successful completion of this discipline, related and subsequent disciplines based on the knowledge obtained during the mastering of this academic discipline, taking into account the structural and logical scheme of the educational program.

2.4. Section 3 "Annotation of the discipline" contains a summary of the discipline content. For practical courses there can be defined the ways and plans concerning the involvement of practitioners and employers to conduct classroom or online training of students.

2.5. Section 4 provides a description of the discipline by the types of training (subsections 4.1 and 4.2 of the Appendix) and types of independent work (subsection 4.3 of the Appendix).

The main types of independent work include tests (the normative amount of hours - 12 hours), calculation and graphic works (the normative amount of hours - 18 hours) and preparation for classes and tests (the normative amount of hours is calculated as the difference between total hours of independent work and hours for tests and calculation work).

2.6. Section 5 "Description of methods for assessing the level of learning outcomes achievements" contains methods for monitoring the learning outcomes of students in the form of current and semester final tests.

2.7. Section 6 "Criteria for evaluating the learning outcomes of students" provides the distribution of points that students can get for each type of current and final control.

Assessment of students' academic achievements is carried out on a 100-point scale. The method of assessment and calculation of students' points is determined by the Procedures regulating the organization of current and semester control of learning outcomes for the students of Lviv Polytechnic National University.

The procedure and criteria for calculating points and giving grades specify the conditions for assessment within the maximum, taking into account the actual level of learning outcomes, and the ways of transferring the points to the grades rating scale.

2.8. Section 7 "Studying resources" contains the list of resources and learning materials complexes of the discipline, including those located in the Virtual learning environment of Lviv Polytechnic.

2.9. In section 8 "Recommended reading" it is necessary to indicate the basic and auxiliary recommended references that students are to refer to while learning the discipline.

The list of basic reference literature, as a rule, includes normative documents, textbooks and manuals, available in the library of Lviv Polytechnic accessible on the Internet.

The list of supplementary literature, which is intended for in-depth study of specific sections or topics, includes various reference books, periodicals, monographs, etc.

The list of literature is compiled in accordance with the requirements of DSTU GOST 7.1: 2006 "System of standards for information, library and publishing. Bibliographic record. Bibliographic description. General requirements and rules of compilation ".

2.10. Section 9 "Information resources for the study of the discipline" provides e-mail addresses of sites that can facilitate the study of the discipline, including Internet sources providing the access to regulatory documents database.

2.11. Section 10, "Academic Integrity Policy," outlines the elements of academic integrity policy in the teaching and learning of disciplines, measures to promote and monitor the adherence to the principles of academic integrity.

2.12. Section 11 "Unified Appendix" provides information on the learning opportunities for the people with special educational needs.

2.13. Section 12 provides a description of grounds and proposals on which the amendments to the WPAD were introduced in accordance with the paragraph 3.4 of this Procedure. It defines the ways of realization of the right of persons with special educational needs to receive higher education.

If necessary, all introduced changes and amendments to the WPAD for the new academic year are recorded, indicating the date and the number of the minutes of the department regular session at which these changes were approved.

# **3. PROCEDURE REGULATING THE DEVELOPMENT, APPROVAL AND UPDATING OF THE WORKING PROGRAM OF ACADEMIC DISCIPLINE**

3.1. WPAD is developed by a leading teacher (lecturer) or a group of teachers of the department, who provide teaching of this discipline. When forming and updating the WPAD, the developers take into account the content of the previous disciplines in accordance with the educational program and its structural-logical scheme, as well as coordinate the content of parallel and subsequent disciplines in accordance with the educational program and its structural-logical scheme.

3.2. WPND is approved by the guarantor of the educational program, is discussed and approved at meetings of the departments and educational and methodical commissions of the specialties (WPAD for several educational programs of different specialties is approved by the head of Scientific and methodological council of the University). WPADs are reviewed annually according to the procedure described above.

The guarantor of the educational program is responsible for the timeliness and quality of the WPAD, which is provided for one educational program.

The person responsible for the timeliness and quality of RPND preparation which is provided for several educational programs is the head of the department (s) where the WPAD developer (s) work.

3.3. WPAD, which is included in the curriculum of several departments, is developed by the author's team of these departments.

3.4. Teachers update WPAD on the basis of:

- changes in educational programs in the prescribed manner;

- changes in regulatory documents and on the basis of orders of the Rector of the University, orders of the University, research institutes and departments;

- proposals of working (project) groups of educational programs and guarantors;

- surveys and proposals by the stakeholders of educational programs;

- achievements and state-of-the-art practices in the relevant field, internationalization of the University, staff participation in projects and programs of internships and advanced training;

- proper substantiation by program developers.

(Sample for the disciplines that provided for one educational program or educational programs of one specialty)

#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE LVIV POLYTECHNIC NATIONAL UNIVERSITY

Institute\_\_\_\_\_

/name of the research-educational institute/

Department \_\_\_\_\_

/name /

«Approved» The Head of SMC of the specialty

/code and title/ \_\_\_\_\_/Surname and Initials /

/signature/

Protocol date «\_\_\_\_»\_\_\_\_20\_\_\_ №

# WORKING PROGRAM OF THE ACADEMIC DISCIPLINE

/code and title of the academic discipline (educational comp[onent)/

/level of higher education/

Type of the discipline\_\_\_\_\_

(obligatory/ selective)

Language of teaching\_\_\_\_\_

Educational program(s)\_\_\_\_\_

specialty \_\_\_\_\_

/ name /

/code and title /

Field of knowledge

/code and title/

Lviv - 20\_\_\_\_

(Sample for the disciplines that provided for one educational program or educational programs of one specialty)

Working program of the academic disciplin	ne		for	
		/title /		
The student of educational program				
		/title(s) and	d code(s) /	
Authors (developers):				
Authors (developers).			/	/
/title and academic position/			/signature/	/
/name			, signature,	
,			/	/
/ title and academic position /			/signature/	
/name/			-	
Current and of the educational and around			1	
Guarantors of the educational program	/010	nature/	/	/name /
	/sig	liature/		/name /
The working program is discussed and appr	roved	at the session	of the department	
			/name of the dep	oartment/
Protocol date «»	20	№		

(Sample for the disciplines that provided for one educational program or educational programs of one specialty)

#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE LVIV POLYTECHNIC NATIONAL UNIVERSITY

Institute\_\_\_\_\_/name of the research-educational institute/

Department \_\_\_\_\_

«APPROVED» The Head of SMC prof. Zagorodniy A.H.

/signature/

Protocol date «\_\_\_\_»\_\_\_\_20\_\_\_ №

## WORKING PROGRAM OF THE ACADEMIC DISCIPLINE

/code and title of the academic discipline (educational component)/

	/level of higher education/	
Type of the discipline		
-	(obligatory/ selective)	
Language of teaching	· · · · ·	
Educational program(s)		
I 8 ()	/ name /	
Specialty(ies)		
	/code and title /	
Field of		
knowledge		
-	/code and title of all specialties/	

Lviv – 20\_\_\_\_

(Sample for the disciplines that provided for one educational program or educational programs of one specialty)

Working program of the academic discipli	ne	for
The student of advastignal and snow	/title /	
The student of educational program		s) and code(s) /
Authors (developers):		
/title and academic position/ /name		/signature/
/ title and academic position / /name/		/signature/
Guarantors of the educational program _	/signature/	//name /
The working program is discussed and app		/name of the department/
Protocol date «»	_20 Nº	
Head of the department where the working program was developed /	d	// /підпис/ /ініціали та прізвище

## 1. Structure of the academic discipline

	Total (hours)		
Indicators	Full-time learning	Corresponden ce learning	
Number of credits/hours.			
Total number of classroom hours, including:			
• Lectures, hours.			
• Seminars, hours.			
Practical classes, hours.			
Laboratory works, hours			
Total number of individual work hours, including:			
• Control tests, number/hours.			
• calculation(calculation-graphic) assignmentss, number/hours.			
• Individual research assignment, number/hours.			
• Preparation for classes and control tests, hours.			
examination			
test			

The ratio of classroom study time of the student in percentage:

full-time education - \_\_\_\_\_; distance learning - \_\_\_\_\_;

2. The purpose and objectives of the discipline

2.1. The purpose of studying the discipline and learning outcomes

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2.2. Tasks of the discipline in accordance with the educational program (except for the selective disciplines)

The study of the discipline involves the formation of students' competencies:

general competencies:

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professional competencies:

2.3. Learning outcomes in accordance with the educational program, methods of teaching and learning, methods of assessing students' achievements and learning outcomes

As a result of studying the discipline, the student must be able to demonstrate the following learning outcomes (for the disciplines that are provided for several educational programs of different specialties):

As a result of studying the discipline, the student must be able to demonstrate the following program learning outcomes (for disciplines that are provided for one educational program, or educational programs of one specialty):

Learning outcomes	Methods of teaching and learning	Methods of assessing the level of learning outcomes and achievements
LO1 (example: AiV1 Ability to adapt to new conditions, make decisions independently and initiate original research and innovation complex projects)	(sample: Lectures, practical classes - information- receptive method, reproductive method, heuristic method, method of problem statement, independent work - reproductive method, research method)	(sample: Current control - execution and defense of practical work, oral and open class discussion)
LO2 (example: AiB2 Ability to realize the need for lifelong learning in order to deepen the acquired professional knowledge and acquire new one)	(sample: Lectures, practical classes - information- receptive method, reproductive method, heuristic method, method of problem statement, independent work - reproductive method, research method)	(sample: Current and examination control. Methods of knowledge assessment: selective oral examination; presentations at seminars, tests, colloquium, evaluation of activity, proposals, original solutions, clarifications and definitions, etc. Exam - written survey, final test)
LO 3		
LO 4		
 LO N		

# 2.4. List of the previous, current and subsequent academic discipline

№ 3/П	Previous academic discipline	Current and subsequent academic discipline
1.		
Ν		

## 3. Annotation of the academic discipline

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# 4. Description of the academic discipline

## 4.1. Lectures

N⁰	Themes	Numbers of hours	
3/п		FTS	CS
1.			
Ν			
	Total		

### 4.2. Practical (seminars, laboratories) classes

N⁰	Themes	Numbers of hours	
3/п		FTS	CS
1.			
Ν			
	Total		

## 4.3. Individual work

		Numbers of hours	
№ 3/п	Titles	FTS	CS
1.			
Ν	Preparing for classroom and individual work		
	Total		

# 5. Methods of knowledge and students achievements assessment

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# 6. Criteria for evaluating the learning outcomes of students

### Sample for tests

Distribution of points on a 100-point scale	
Current control (CC)	
(indicate various forms of current control and maximum scores for the	Total
completed tasks)	

	Maxim	um mark in poi	nts	
Current control (CC)		Exam		Total
(indicate various	Total for CC	Written component	Oral component	
forms of current control and maximum scores for the completed tasks)				

## Sample for exam

#### Order and criteria of assessment

#### 7. Educational and methodological resources

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#### 8. Reference literature

Main

Supplementary		
•••••••••••••••••••••••••••••••••••••••		
9. Informational resources		

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#### **10. Academic integrity policy**

The policy on academic integrity of educational process participants is formed on the basis of adherence to the principles of academic integrity, taking into account the norms of "Regulations on academic integrity at Lviv Polytechnic National University (approved by the Academic Council of Lviv Polytechnic National University 20.06.2017, Protocol № 35).

#### **11. UNIFIED APPENDIX**

Lviv Polytechnic National University ensures the realization of the right of persons with special educational needs to obtain higher education. Inclusive educational services are provided by the Unrestricted Access to Learning Service, the purpose of which is to provide constant individual support to the educational process of students with disabilities and chronic diseases. An important tool for the implementation of inclusive education policy at the University is the Program of advanced training of research and teaching staff and teaching and support staff in the field of social inclusion and inclusive education. Contact:

Karpinskiy Str., 2/4, academic building # 1, room 112

E-mail: nolimits@lpnu.ua

Websites: https://lpnu.ua/nolimits https://lpnu.ua/integration

№ 3/п	Content of the introduced amendments and additions	Date and № of the Department session Protocol	Notes (reasons, initiators, etc.)
1			
•••			
Ν			

#### 12. Amendments and additions to the working program of the academic discipline