

**Ministry of Education and Science of Ukraine
STATE HIGHER EDUCATIONAL INSTITUTION
"National Mining University"**

Level of higher education
second

Higher Education Degree
master

Specialties of knowledge areas:
12 Information Technology

**PROGRAM OF EDUCATIONAL DISCIPLINE
"PEDAGOGY OF THE HIGHER SCHOOL"**

Dnipro
NMU
2017

Salov V.A. Work program of the academic discipline "Pedagogy of higher education" for masters [Electronic resource] / V.A. Salov, T.O. Pismenkova; Ministry of education and science of Ukraine, NMU. - D .: NMU, 2017. - 27 p.

Recommended for publication by the editorial board of the State Higher Educational Institution "NSU" (Protocol No. 7 of 05.06.2017.

CONTENTS

INTRODUCTION	Ошибка! Закладка не определена.
1. Scope of application	Ошибка! Закладка не определена.
2. Normative references	10
3. Scope of subject	Ошибка! Закладка не определена.
4. Educational outcomes	10
5. Individual task	19
6 Requirements for information and methodical support and teaching aids	19
7 Form of final monitoring, diagnostic tools and evaluation criteria	20
BIBLIOGRAPHY	1

INTRODUCTION

The university teaching staff is traditionally formed and supplemented by graduates of postgraduate studies, research workers and experienced practitioners. Such a staff system forms only a scientific and objective component of teaching activity.

For the industry staff supplement and integration into the European educational space, the traditional forms of further training and internship for teachers of higher educational institutions are not sufficient today.

The new regulatory framework expands and complicates the range of current and prospective tasks for the development of higher professional education. Increasing the requirements for graduates requires the humanization of education, the increasing of interdisciplinary linkages, the dynamic development of training programs and curricula, organizational forms and technologies of training based on a competence approach.

The preparation of the Master's degree is focused on the innovative and research character of professional activity in higher education. The master in accordance with the legislation can hold positions of assistant, trainee teacher, head of the study laboratory, methodologist, researcher.

The focus of the high school teacher's activity is the technology of designing normative and methodological documents, that model the pedagogical process, the technologies for its implementation, organization and management of the definite technologies within the limits of authority of primary teaching positions.

The goal of the normative discipline "Pedagogy of Higher Education" is the disclosure of the components of the teacher's activity in primary positions.

The program uses the following basic concepts:

- 1) *autonomy and responsibility* – the ability to independently perform tasks, to solve problems and to be responsible for the results;
- 2) *accreditation of education programs* – the evaluation of the educational program and / or educational activities of the higher education institution; the ability to meet the requirements of the standard and achieve the stated learning outcomes in the program;
- 3) *higher education* – a set of systematized knowledge, skills and practical skills, ways of thinking, professional, worldview and civic qualities, moral and ethical values and other competences obtained in a higher education institution (scientific institution) in the relevant field of knowledge, that is higher than the level of complete general secondary education;
- 4) *higher education institution* – a separate type of institution, which is a legal person of private or public law, operates according to the issued license for educational activities at certain levels of higher education, conducts scientific and technical, innovative and/or methodological activities, ensures the organization of the educational process and obtaining persons of higher education, postgraduate education;

- 5) *the branch of knowledge* – the main subject matter of education and science, it includes a group of related specialties. By this group vocational training is provided;
- 6) *disciplinary competencies* - detailed competences as a result of the decomposition of competences of a specialist in the specialty of a certain level of higher education;
- 7) *the European system of credit transfer and accumulation (ESTA)* - the system of transfer and accumulation of credits, is used in the European Higher Education Area to provide, recognize, confirm the qualifications and educational components and promote the academic mobility of applicants for higher education. The system is based on determining the academic load of the applicant for higher education, which is necessary to achieve certain learning outcomes, and is taken into account in ESTA credits;
- 8) *diagnostic tools* - documents approved in accordance with the established procedure, and designed to establish the degree of achievement of the planned level of the formation of competences of the student in control activities;
- 9) *applicants for higher education* are persons who study at a higher educational institution at a certain level of higher education in order to obtain the appropriate degree and qualification;
- 10) *a substantial module* - a set of skills, knowledge, values that ensure the implementation of certain competencies;
- 11) *knowledge* is meaningful and learned by the subject scientific information, which is the basis of its conscious, purposeful activity. Knowledge is divided into empirical (factual) and theoretical (conceptual, methodological)
- 12) *integral competence* - a generalized description of the qualification level, which expresses the main competency characteristics of the level of training and / or professional activity;
- 13) *integrated assessment* is the result of evaluating specific tasks of different levels, taking into account the priority factor (the planned level of competency formation)
- 14) *information support of the academic discipline* - teaching aids in which the basic principles of knowledge on a certain discipline at the level of modern achievements of science and culture are systematically set forth, a support for self-education and self-education (textbooks, teaching aids, textbooks, dictionaries, encyclopedias, reference books, etc.);
- 15) *essential operation* - step of the decision algorithm, calculation scheme, definition of concepts, parameters and actions over them, and the like;
- 16) *qualification level* - the structural unit of the National Qualifications Framework, which is determined by the set of competencies that are typical for the qualification of this level;
- 17) *qualification* is the official result of the assessment and recognition obtained when the authorized competent body has determined that the person has achieved competencies (learning outcomes) according to specified standards;

- 18) *competence* - the person's ability to perform a certain type of activity, expressed through knowledge, understanding, skill, values, other personal qualities;
- 19) *competence* - the terms of reference of a specialist (functions, tasks and their components - relevant skills);
- 20) *communication* - the interrelationship of entities with the purpose of conveying information, coordinating actions, joint activities;
- 21) *credit, the European credit transfer and accumulation system (hereinafter referred to as the ECTS loan)* is a measure of the amount of the academic load of the applicant for higher education required to achieve certain (expected) learning outcomes. The volume of one ECTS loan is 30 hours. The workload per academic year for the full-time form of education is, as a rule, 60 ECTS loans;
- 22) *methodical support of the academic discipline* - recommendations for accompanying the student's educational activities for all types of training sessions, including information on the means and procedures of control measures, their form and content, methods of solving exercises, information sources;
- 23) *modular control* - an assessment of the degree to which the student achieves the planned level of competence in types of training sessions;
- 24) *educational discipline* - the totality of modules subject to final control;
- 25) *educational element* - minimal educational information of an independent semantic meaning (concepts, phenomena, relations, algorithms)
- 26) *the object of diagnosis* - competence, the mastery of which is ensured by the academic discipline;
- 27) *the educational process* is intellectual, creative activity in the sphere of higher education and science, is produced in a higher educational institution (scientific institution) through a system of scientific, methodological and pedagogical activities and is aimed at the transfer, assimilation, augmentation and use of knowledge, skills and other competences of persons studying, as well as the formation of a harmoniously developed personality.
- 28) *an educational (educational, professional or educational-scientific) program* - a system of educational components at an appropriate level of higher education within the specialty, which determines the requirements for the level of education of persons who can start studying under this program, the list of educational disciplines and the logical sequence of their study, the number of ECTS loans required to implement this program, as well as the expected learning outcomes (competencies) that the applicant must master favoring higher education degrees;
- 29) *educational activities* - the activities of higher education institutions, is designed to ensure the receipt of higher, postgraduate education and meet other educational needs of applicants for higher education and other persons;
- 30) *final control* - a comprehensive assessment of the planned level of the formation of disciplinary competencies;
- 31) *current control* - assessment of the student's learning of the educational material during the classroom training (interviewing students at lectures, checking and receiving reports on the performance of laboratory work, testing, etc.);

- 32) *the program of discipline* - the normative document that determines the content of the academic discipline in accordance with the educational program, is developed by the department, which is fixed by the order of the rector for the teaching of discipline;
- 33) *the level of formation of disciplinary competence* - the proportion of correct answers or performed significant transactions from the total number of issues or significant operations of the standard solutions. Determined when monitoring. The level of formation of disciplinary competencies is established on the basis of the results of the comprehensive control work;
- 34) *learning outcomes (National Qualifications Framework)* - competence (knowledge, understanding, ability, values, other personal qualities) that the person acquires and / or is able to demonstrate after completion of training;
- 35) *learning outcomes (the Law of Ukraine "On Higher Education")* - the totality of knowledge, skills, other competences acquired by a person in the process of training in a certain educational, professional, educational and scientific program that can be identified, quantified and measured;
- 36) *the work program of the discipline* is a normative document developed on the basis of the program of discipline in accordance with the annual curriculum (contains the distribution of the total time for mastering individual learning elements and modules by types of training sessions and forms of instruction);
- 37) *independent work* - the student's activity in studying the learning elements and content modules, mastering the planned competences, performing individual tasks, preparing for control activities;
- 38) *specialization* - a component of the specialty, determined by a higher educational institution and provides a specialized educational, professional or educational and scientific program for the training of applicants for higher and postgraduate education;
- 39) *specialty* - a component of the field of knowledge, which provides training;
- 40) *the standard of higher education* is a set of requirements for the content and results of educational activities of higher educational institutions and scientific institutions for each level of higher education within each specialty;
- 41) *the standard of educational activity* is a set of minimum requirements for personnel, educational, methodological, material and technical and information support for the educational process of a higher educational institution and scientific institution;
- 42) *degree of complexity of competences* - laboriousness of actions for their implementation. Distinguish the following degrees of complexity:
 GS - familiarization-oriented (characteristic actions - to reproduce, know, describe, denote, call, depict, assimilate the essence, understand the meaning, distinguish, compare, identify, choose, prove)
 PA - conceptual-analytical (characteristic actions - deliberately use, change, solve, find, explain, calculate, analyze, differentiate, embrace, separate, contrast)

PS - productive-synthetic (characteristic actions - synthesize, compose, develop, develop, re-formulate, plan, generate, evaluate, define, interpret, criticize, predict).

The degree of complexity of a certain competence depends on the requirements of the specialty (specialization) of the applicant for higher education, is distinguished by procedures and is noted in the program of the discipline. Identifying the necessary degree of complexity of competencies and fixing it in a discipline program creates prerequisites for real quality assurance of higher education;

- 43) *test* - the form of the diagnostic tool, consists of a task and a standard. The task contains the statement of the problem, the standard is a sample of the complete and correct solution of the problem, the test parameters - the level of the test, the number of significant operations, the coefficient of assimilation;
- 44) *ability* - the ability to apply knowledge to perform tasks and solve problems and problems. Ability to divide into cognitive (intellectual-creative) and practical (based on skill using methods, materials, instructions and tools).
- 45) *the quality of higher education* - the level of the person's knowledge, skills, skills, and other competences, reflecting her competence in accordance with higher education standards;
- 46) *the quality of educational activity* - the level of organization of the educational process in a higher educational institution, meets the standards of higher education, ensures that persons receive quality higher education and fosters the creation of new knowledge.

1. Scope of application

The program extends to the departments, which are instructed to teach the discipline by the order of the rector.

The program is designed for:

- development of a work program of discipline;
- implementation of the competence approach in the formation of the structure, content of discipline and diagnostic tools;
- definition of the information base for the formation of diagnostic tools;
- internal and external quality control training of specialists;
- accreditation of the Master's degree program in the specialty.

The program establishes:

- list of disciplinary competencies, used as a criterion for determining learning outcomes (competencies) and as an information base for the formation of diagnostic tools;
- level of complexity of disciplinary competencies for this specialty;
- the composition of content modules and training elements ensuring the acquisition of disciplinary competencies;
- forms of diagnostics of the level of competence formation;
- requirements for diagnostic tools;
- criteria for assessing students' academic achievements;
- information and methodological support of the discipline.

2. Normative references

2.1. Resolution of the Cabinet of Ministers of Ukraine "On Approval of the National Framework of Qualification" of November 23, 2011 No. 1341. - Kiev.

2.2. Law of Ukraine "On Higher Education" of 01.07.2014 // Statement of the Verkhovna Rada. - 2014. - No. 37, 38.

2.3. Decree of the Cabinet of Ministers of Ukraine from 26.04.2015 №266 "List of branches of knowledge and specialties, which prepares applicants for higher education".

2.4. Standards and recommendations for quality assurance in the European Higher Education Area. - Moscow: Lenvit, 2006. - 35 p.

3. Scope of discipline

The total amount is 4 ECTS credits (120 academic hours).

4 Learning Outcomes

Disciplinary competence	Content modules	Обсяг, години		
		Lecture hall	CPC	Total
1	2	3	4	5
Remote module 1. General characteristics of the higher education system in Ukraine		2	4	6
1.1. Description of the components of the regulatory framework of higher education	1.1.1. The Law of Ukraine "On Higher Education"			
	1.1.2. National Qualifications Framework			
	1.1.3. The list of branches of knowledge and specialties			
	1.1.4. Classifier of professions			
	1.1.5. Professional standards			
1.2. Identification and description of the components of the higher education system	1.2.1. State policy in higher education			
	1.2.2. Higher education system			

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
	1.2.3. Quality assurance system for higher education			
	1.2.4 Licensing of educational activities			
	1.2.5. Accreditation of the educational program			
	1.2.6. Educational process			
Remote module 2. Technologies for designing higher education. Higher Education Standards		4	8	12
2.1. Description of the general principles of the social division of labor in Ukraine	2.1.1. State regulation of professional activity			
2.2. Understanding the positioning of a specialist in a certain specialty and qualification in the social division of labor	2.1.2. The positioning of a specialty specialist at a certain level of higher education in the social division of labor, taking into account the requirements of the Law of Ukraine "On Higher Education", the National Qualifications Framework and the List of Knowledge Areas and Specialties			
2.3. Possession of information on the nomenclature and content of normative documents of the sphere of labor in relation to the requirements for the professional qualification of specialists of a certain specialty	2.3.1. Types of economic activity			
	2.3.2. Classifier of professions			
	2.3.3. Professional standards			
	2.3.4. Job descriptions			
2.4. Reproduction of the generalized structure of the production process by specialty (specialization) of a	2.4.1. Generalized structure of the production process			

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
certain level of higher education				
2.5. Description of the methodology for studying the structure of work of a specialty specialist (specialization) of a certain level of higher education	2.5.1. Methodology for studying the structure of work			
2.6. Classification of structural elements of professional activity	2.6.1. Functions			
	2.6.2. Professional tasks			
	2.6.3. Professional skills			
2.7. Description of the algorithm for forming a system of competencies as criteria for selecting the content of training	2.7.1. Formation of the system of professional competences of a specialist specializing in a certain level of higher education			
	2.7.2. Formation of the system of humanitarian competencies of a competitor of a certain level of higher education			
	2.7.3. Formation of the system of fundamental competencies of a competitor of a certain level of higher education			
2.8. Description of the algorithm for the formation of higher education standards	2.8.1. Algorithm for the formation of higher education standards			
Remote module 3. Technologies for designing higher education. educational programs		4	12	16
3.1. Description of the algorithm for forming the competence of a specialist with a higher education of a certain level, ensuring the implementation of planned competencies	3.1.1. The methodology of forming the competencies of the specialist, ensuring the implementation of competences			

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
3.2. Distribution of content modules for academic disciplines 3.3. Description of the algorithm for the formation of the nomenclature of educational disciplines, their distribution according to the preparation cycles 3.4. Determination of the volume of educational disciplines and forms of final control	3.2.1. Method of distribution of content modules for disciplines 3.3.1. Formation of the nomenclature of educational disciplines and practices 3.3.2. Learning cycles 3.3.3. Distribution of disciplines in cycles of study 3.4.1. Classroom 3.4.2. Independent work of the student 3.4.3. Forms of final control			
3.5. Reproduction of structure educational programs in the specialty (specialization) of applicants a certain level of higher education	3.5.1. Structure of educational programs in the specialty (specialization) of applicants at a certain level of higher education			
Remote module 4. Technologies for designing higher education. The program of the academic discipline		4	12	16
4.1. Reproduction of the structure of the curriculum	4.1.1. The structure of the curriculum and general characteristics of the components			
4.2. Reproduction of the structure of the curriculum work program	4.2.1. The structure of the curriculum's work program and the general characteristics of the components			
4.3. Substantiation of the methodology for the formation of a system of disciplinary competencies	4.3.1. Formation of a system of disciplinary competencies (academic goals of the discipline)			

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
4.4. Substantiation of the criteria for determining the maximum level of competence formation	4.4.1. Levels of competence formation			
	4.4.2. Criteria for determining the maximum level of competence formation			
4.5. Reproduction of the methodology for determining the learning outcomes (competences) for the discipline	4.5.1. Methodology for determining the results of training in discipline			
4.6. Justification of the types and forms of training sessions that ensure achievement of training objectives	4.6.1. Choice of types and forms of training sessions that ensure achievement of training objectives			
4.7. Choice of types and forms of control of the degree of achievement of the planned level of competence formation	4.7.1. Kinds and forms of control of the degree of achievement of the planned level of competence formation			
4.8. Reproduction of requirements to means of diagnostics of level of competence formation	4.8.1. Method of funds formation			

Module 5. Planning and organizing of the educational process		6	8	14
5.1. Classification and description of the types of organization of the educational process	5.1.1. Forms and organizational types of the educational process			
	5.1.2. Training sessions			
	5.1.3. Individual tasks			
	5.1.4. Independent work of students			
	5.1.5. Practical training			
	5.1.6. Control measures			
5.2. Reproduction of the algorithm for the formation of the structural-logical scheme of the educational process	5.2.1. Requirements for the structural-logical scheme of the educational process			

5.3. Reproduction of requirements to the schedule and the plan of the educational process	5.3.1. Schedule of the educational process			
	5.3.2. Curriculum			
	5.3.3. Work (annual) curriculum			
	5.3.4. Student working hours			
	5.3.5. The teacher's working hours			
	5.3.6. Standards for creating graphics and curriculum plans			
5.4. Reproduction of the personnel training algorithm of the educational process	5.4.1. The norms of the number of students per one permanent post of scientific and pedagogical worker			
	5.4.2. Calculations of personnel provision of the educational process			
5.5. Reproduction of the algorithm for evaluating the activity of the EPP	5.5.1. Evaluation of EPP activity			
5.6. Description of the system of advanced training and internship of the EPP	5.6.1. Improvement of qualification and training of EPP			
Module 6. Information and methodological support of the educational process		4	8	12
6.1. Reproduction of general requirements for educational literature	6.1.1. General pedagogical requirements			
	6.1.2. Understanding of the textbooks			
	6.1.3. Content availability			
	6.1.4. Requirements of European integration processes			
6.2. Classification and characterization of types of methodical provision of educational process	6.2.1. Methodical provision of training sessions			
	6.2.2. Methodical provision of individual tasks			
	6.2.3. Methodical provision of practice			

	6.2.4. Methodical provision of certification			
6.3. Classification and characterization of types of informational support of the educational process	6.3.1. Types of information support			
	6.3.2. Structure of textbooks and manuals			
	6.3.3. Requirements for structural elements			
	6.3.4. The amount of educational publications			
6.4. Possession of the rules of registration of manuscripts of educational literature	6.4.1. Elements of the text			
	6.4.2. Tables			
	6.4.3. Illustrations			
	6.4.4. Notes			
	6.4.5. Footnotes			
	6.4.6. Bibliographic list			
6.5. Reproduction of steps for the preliminary review of manuscripts of educational literature and the provision of stamps	6.5.1. Examination of manuscripts			
	6.5.2. Review of manuscripts			
	6.5.3. Editing manuscripts			
	6.5.4. Consideration of manuscripts by the Academic Council of the University and providing a stamp			
6.6. Reproduction of the order of the publication of educational literature	6.6.1. Printed editions			
	6.6.2. Electronic educational resources			
Module 7. Learning technology		6	6	12
7.1. Reproducing the process of processing information by man	7.1.1. Psychological and sociological aspects of teaching			
7.2. Possession of the algorithm of the organization of perception, awareness and consolidation of the educational material by the students	7.2.1. Stages of cognitive actions			
	7.2.2. Planning of training sessions			
	7.2.3. Formation of educational goals			
	7.2.4. Structure of the educational material			
7.3. Choice of methods and means of training	7.3.1. Organization and management of cognitive activity of students			

7.4. Rebuilding the basics of teaching technology	7.4.1. Linguistic and non-spoken communication			
	7.4.2. Preparation for training sessions and their conducting			
	7.4.3. The style of student leadership			
7.5. Possession of technical means of training	7.5.1. Modern technical means of training			
7.6. Description of methods for controlling the results of students' educational activities	7.6.1. Algorithms for conducting current and final control over the forms of training			
Module 8. Means of diagnostics of the level of formation of competences in discipline		4	8	12
8.1. Justification of the requirements for the formation of an information base for the creation of diagnostic tools	8.1.1. Information base for the development of diagnostic tools			
8.2. Determination of the level of tests	8.2.1. Parameters of the test			
8.3. Reproduction of the method of development of generalized and specified test tasks	8.3.1. Generalized and specified test tasks			
8.4. Determination of the number of essential operations of the standard	8.4.1. Standards for test decisions			
8.5. Substantiation of requirements for evaluation criteria	8.5.1. Criteria for evaluating the results of student tests, assessment scale			
Module 9. Certification candidates		6	8	14
9.1. Reproduction of requirements for the structure of the content of the CQM	9.1.1. Requirements to the structure and content of the CQM			

9.2. Determination of initial data of the CQM for real production situations that are characteristic of the professional duties of a specialist of a certain level of higher education	9.2.1. Formation of output data of CQM			
9.3. Reproduction of methods of creating prototype solutions of CQM	9.3.1. Standards for solutions			
9.4. The choice of reference literature that is necessary and sufficient for the execution of the CQM	9.4.1. Formation of reference literature			
9.5. Justification of the criteria for evaluating the implementation of the CQM	9.5.1. Criteria for evaluating the results of students' performance of complex qualification tasks			
9.6. Reproduction of requirements for the formation of the topics of qualifying works (diploma projects, diploma works)	9.6.1. Subjects of qualifying works by levels of higher education			
9.7. Formation of the task for the qualification work	9.7.1. Task for qualifying work			
9.8. Reproduction of an algorithm for managing the performance of qualification work	9.8.1. Requirements for qualifying works			
9.9. Formulation of criteria for evaluating the quality of performance of qualification work	9.9.1. Criteria for evaluating the results of students' performance in qualifying work			
9.10. Reproduction of the structure of the supervisor's response to the qualification work	9.10.1. Requirements for the response of the supervisor of the qualification work			

9.11. Description of the algorithm for preparing the graduate for the protection of qualification work	9.11.1. Algorithm of preparation for the protection of qualification work			
Module 10. Ways to ensure the competitiveness of higher education in Ukraine		2	4	6
10.1. Description of problems and development trends of higher education in Ukraine	10.1. Ukraine's place in the international rankings, depending on the indicators of higher education			
	10.2. Place of higher education in the national economy			
	10.3. Policy in education and higher education			
	10.4. The system of higher education of Ukraine			
	10.5. Resource			
	10.6. External factors of the national system of higher education			

Auditory load of all 42
Individual work of all 78
Total amount 120

5 Individual task

The structure of the task for the master thesis:

- object of research, subject, goal;
- initial data for the work;
- the scientific novelty of the expected results;
- practical value;
- requirements for the results of the work;
- stages of work execution;
- economic, social effect;
- additional requirements.

6 Requirements for information and methodological support and technical means of training

6.1. Composition of information support:
lecture notes (tutorial);

slides that reflect the essence of each module of discipline;
basic normative documents on higher education.

6.2. Composition of methodical support:

methodical recommendations for the implementation of an individual task;
methodical recommendations for individual work on preparation for control measures.

6.3. Technical training – electronic projector.

Note:

Materials of informational and methodical support must meet the requirements, presented in the manual:

Salov V. A. Creation of a textbook for higher education: manual / **Salov V. A.**, **Y. A. Shabanova**, **O. N. Ilchenko**; National Mining University – D. : NMU, 2014. – 189 p.

7 Form of final control, diagnostic tools and evaluation criteria

7.1. Form of final control – a score based on the results of the current control and the implementation of a comprehensive control work (if necessary).

7.2 Diagnostic tools

7.2.1 Generalized diagnostic tools

Provide student demonstration of such abilities:

Remote module 1. General characteristics of the higher education system in Ukraine:

1.1. Describe the components of the regulatory framework of higher education

1.2. Identify and describe the components of the higher education system

Remote module 2. Technologies for designing higher education. Higher Education Standards

2.1. Describe the general principles of the social division of labor in Ukraine

2.2. To position a specialist in a specialty and qualification in the social division of labor

2.3. To have information on the nomenclature and content of normative documents of the sphere of work requirements for the professional qualification of specialists of a certain specialty

2.4. To recreate the generalized structure of the production process by specialty (specialization) of a certain level of higher education

2.5. Describe the methodology of research of the structure of labor specialist specialty (specialization) of a certain level of higher education

2.6. Classify the structural elements of professional activity

2.7. Describe the algorithm of forming a system of competencies as criteria for

selecting the content of training

2.8. Describe the algorithm of higher education standards formation

Remote module 3. Technologies for designing higher education. Educational programs

3.1. Describe the algorithm of forming the competencies of a specialist with a higher education of a certain level, ensuring the implementation of planned competencies

3.2. Describe the algorithm of the formation of the nomenclature of academic disciplines, their division into training cycles

3.3. Identify final control forms

3.4. To recreate the structure of educational programs by specialty (specialization) of applicants of a certain level of higher education

Remote module 4. Technologies for designing higher education. The program of the academic discipline

4.1. To recreate the structure of the curriculum work program

4.2. To substantiate the methodology of forming a system of disciplinary competences

4.3. To substantiate the criteria for determining the boundary level of the formation of competencies

4.4. To recreate the methodology for determining the results of training (competencies) by discipline

4.5. To substantiate types and forms of educational activities that ensure the achievement of the training objectives

4.6. To choose the types and forms of control of the level of achievement of the planned level of formation of competencies

4.7. To recreate requirements for means of diagnostics of the level of formation of competencies

Module 5. Planning and organizing of the educational process

5.1. Classify and describe the types of educational process organization

5.2. To recreate the algorithm of the formation of the structural-logical scheme of the educational process

5.3. To recreate the requirements for the curriculum and plan

5.4. To recreate the algorithm of staffing of the educational process

5.5. To recreate the algorithm for evaluating the activity of the **IIII**

5.6. Describe the refresher training system and the training of **IIII**

Module 6. Information and methodological support of the educational process

6.1. To recreate the general requirements for educational literature

6.2. Classify and characterize the types of methodological provision of the educational process

6.3. Classify and characterize the types of information provision of the learning process

6.4. Own rules for the issuance of manuscripts of educational literature

6.5. Reproduce the steps for preliminary review of manuscripts of educational literature and the provision of stamps

6.6. Reproduce the order of the publication of educational literature

Module 7. Learning technology

7.1. Reproduce the process of processing information by a person

7.2. Own an algorithm for organizing the perception, awareness and consolidation of student material

7.3. To choose methods and means of training

7.4. To recreate the basics of teaching technology

7.5. To have the technical means of study

7.6. Describe the methods of controlling the results of students' educational activities

Module 8. Means of diagnostics of the level of formation of competences in discipline

8.1. To substantiate the requirements for the formation of an information base for the creation of diagnostic tools

8.2. Determine the level of tests

8.3. Reproduce the methodology for developing generalized and specific test tasks

8.4. Determine the number of essential operations of the standard

8.5. To substantiate requirements for evaluation criteria

Module 9. Certification candidates

9.1. To recreate the requirements for the structure of the content of the CQM

9.2. Determine the initial data of the CQM for real production situations that are characteristic to the professional duties of a specialist of a certain level of higher education

9.3. Reproduce methods for creating prototype solutions for CQM

9.4. Choose the reference literature that is necessary and sufficient for the execution of the CQM

9.5. To substantiate the criteria for evaluating the implementation of the CQM

9.6. To recreate requirements for the formation of the subjects of qualifying works (diploma projects, diploma works)

9.7. To form the tasks for the qualification work

9.8. To recreate an algorithm for managing the performance of qualification work

9.9. To formulate criteria for evaluating the quality of performance of qualification work

9.10. To recreate the structure of the supervisor's response to the qualification work

9.11. Describe the algorithm for preparing a graduate for the protection of qualification work

Module 10. Ways to ensure the competitiveness of higher education in Ukraine

10.1. Describe the problems and trends of higher education in Ukraine

7.2.2 Specified diagnostic tools

The precise diagnostic tools that are directly used for control measures during lectures are formed on the basis of generalized numerical or other concretization of means in the form of tests of closed and open types.

The information base to form concretized diagnostic tools (tests of open or closed type) should be expected learning outcomes provided by this program (Chapter 4).

The test consists of a task and a benchmark. The standard is a model of a complete and correct solution.

The test parameters are the degree of complexity and the number of essential operations.

The degree of complexity of the test should correspond to the planned disciplinary competences that the applicant must demonstrate by certain actions during the control activities (to reproduce, describe, designate, name, represent, assimilate the essence, understand the content, distinguish, compare, identify, select, prove, deliberately use, change, solve, find, explain, calculate, analyze, differentiate, cover, separate, contrast, synthesize, compile, develop, develop, in a new form to plan, generate, evaluate, identify, interpret, critique, predict, etc.).

The number of essential operations is the number of actions that are of fundamental importance to obtain the correct result (steps of the implementation algorithm, calculation schemes, definition of concepts, parameters and their application). The calculation of the number of essential transactions is conducted in accordance with the standard.

Standards for tasks can be fragments of educational, scientific and technical literature and other sources. In this case, it is necessary to provide a list of exact references to the relevant sources (bibliographic description of the publication, coordinates of the reference - a link to the page, paragraph).

The complete set of tests in the full description (task and standard) for all disciplinary competencies is approved by the department, it is included in the documentation of methodological support.

To provide the transparency of diagnostic tools' content, generalized tasks should be made available to students throughout the course of study.

7.3. Criteria and procedures for assessing the academic achievements of graduates

Objective evaluation of the results of tasks performed is possible (as well as any other measurement) only when compared with the standards.

Staged matching of answers with the standard allows to objectively establish the quality of the tasks from the position of the level of achievements, the proportion of correctly executed essential operations to their total.

The process of evaluation is greatly simplified if, for the number of essential operations, only the steps of the task execution algorithm are taken.

For reliability of diagnostics, the number of essential operations in the standards should be at least 30. The contents of the standards should correspond to the program of discipline regarding the degree of complexity of educational competences.

Criteria for the quality of individual tasks:

- ♦ compliance of the structure of the task with the qualification work of the master's normative base;
- ♦ compliance with the current requirements of the wording:
 - topic of qualification work;
 - object, subject and purpose of the research;
 - novelty and practical value that are expected;
- ♦ lexical, grammatical and spelling literacy;
- ♦ execution of the text in accordance with current standards;
- ♦ independence of performance (it turns out during protection).

7.4. Evaluation of the results of training in discipline

Results of studies showing formation by determining the level of competence that serves as the evaluation criteria under the scheme of the Diploma Supplement European model:

Scales for assessing academic achievement for higher education graduates

Marks, %	Grade
National Differentiated Scale	
90 – 100	Excellent
74 – 89	Good
60 – 73	Satisfactory
1 – 59	Fail
ECTS Scale	
90 – 100	A
82 – 89	B
74 – 81	C
64 – 73	D
60 – 63	E
35 – 59	Fx
1 – 34	F

The level of formation of competencies of the applicant is determined on the basis of the analysis of the answer by the formula:

$$P_i = a / m, \%$$

where a – the number of correct answers or significant transactions performed on the basis of reference solutions;

m – total number of questions or significant transactions of reference solutions.

The integral level of student achievement in mastering discipline material as a whole is calculated as the average value of achievements, demonstrated during each control event:

$$IP = \sum_{i=1}^n (P_i \times T_i) / T, \%,$$

where n – number of content modules;

P_i – the level of achievements for the i -th module, %;

T_i – the volume of the i -th module, including the individual task;

T – total volume of discipline.

BIBLIOGRAPHY

1. Law of Ukraine "On Higher Education" of 01.07.2014 // Information from the Verkhovna Rada. – 2014. – № 37, 38.
2. Resolution of the Cabinet of Ministers of Ukraine «On approval of the national qualifications framework» of 23.11.2011 № 1341. – Kiev.
3. Resolution of the Cabinet of Ministers of Ukraine of 26.04.2015 №266 «The list of fields of knowledge and specialties, which provides training for higher education graduates».
4. Salov V. A. Summary of lectures on discipline «Pedagogy of high school». Remote modules: summary of lectures / Salov V. A.; National Mining University – D.: NMU, 2015. – 121 p.
5. Salov V. A. Creation of a textbook for higher education: manual / Salov V. A., Y. A. Shabanova, O. N. Ilchenko; National Mining University – D. : NMU, 2014. – 189 p.
6. Standards and Recommendations for Quality Assurance in the European Higher Education Area. – K. : Lenvit, 2006. – 35 p.

Educational edition

Salov Volodymyr Aleksandrovich

**WORKING PROGRAM OF EDUCATIONAL DISCIPLINE
«PEDAGOGY OF HIGH SCHOOL»**

Editor O.N. Ilchenko

Signed for release 10.06.2015.
Electronic resource.

Issued
at the State Higher Educational Institution
«National Mining University».
Certificate of entry in the State Register of **ДК** № 1842 від 11.06.2004
49005, Dnipropetrovsk, K. Marx avenue, 19.