



Pedagogical practice

Work program of Pedagogical practice (Syllabus)

Details of the discipline

Level of higher education	<i>the third (educational and scientific)</i>
Branch of knowledge	<i>natural sciences</i>
Specialty	<i>101 Ecology</i>
Educational program	<i>Ecology</i>
Discipline status	<i>Normative</i>
Form of study	<i>full-time (daytime)/full-time (evening)/correspondence/distance/mixed</i>
Year of preparation, semester	<i>2th year, 3th semester</i>
The scope of discipline	<i>2(60)</i>
Semester control / control measures	<i>test</i>
Lessons schedule	<i>Practice lasts 2 weeks and can be carried out throughout the semester</i>
Language of instruction	<i>Ukrainian</i>
Information about the course leader	Responsible for the organization of practice Ovsyankina Victoria: https://eco-paper.kpi.ua/pro-kafedru/vykladachi/ovsyankina-viktoriya-oleksijivna.html Practice managers: https://eco-paper.kpi.ua/pro-kafedru/vykladachi
Course placement	https://eco-paper.kpi.ua/navchannia/praktyka.html

Curriculum

1. Description of the discipline, its purpose, subject of study and learning outcomes

Pedagogical practice is a mandatory and integral part of quality training of future teachers.

The purpose of studying of this discipline is forming a set of skills to convey to the audience their own knowledge in graduate students. It is an extremely important component of the process of professional training of future teachers, an important stage of their professional growth. Pedagogical practice provides a link between theoretical and practical training. The main tasks of pedagogical practice are: involvement of graduate students in professional and pedagogical activities in a real higher education institution; promoting the formation of ideas about the activities of teachers of higher educational institutions; formation of skills of work with students at the organization of lecture, seminar, practical and laboratory works; development of pedagogical thinking and acquisition of research skills in relation to pedagogical activity; formation of skills of performing the analysis of the scientific problem and expressing one's own point of view, showing honesty, scientific correctness, respect for opponents; formation of skills to assess the feasibility of applying the results of scientific research for a variety of practical tasks and prospects for future research; deepening of special, technical, psychological and pedagogical knowledge through their application in practice; formation of skills to independently plan one's own pedagogical activities and implement it; formation of skills to carry out self-assessment of own pedagogical activity.

In accordance with the purpose training of doctors of philosophy in this specialty requires strengthening of the competencies formed in graduate students:

- ability to solve complex problems on the basis of a systematic scientific and cultural worldview in compliance with the principles of professional ethics and academic integrity;
- ability to use modern tools, electronic information resources, specialized software in scientific and educational activities, in particular for modeling processes and making optimal decisions in the field of ecology, nature protection and environmental management;
- ability to carry out scientific and pedagogical activities in higher education;
- ability to analyze critically, evaluate and synthesize new and complex ideas.

According to the requirements of the program of pedagogical practice, postgraduate students must demonstrate the following program learning outcomes after its completion:

- understand deeply the conceptual principles and methodology of natural sciences, formulate and test hypotheses, use appropriate evidence for substantiate conclusions, in particular, the results of theoretical analysis, experimental research and mathematical and / or computer modeling to solve significant scientific and applied environmental issues;
- plan and perform experimental and / or theoretical research in ecology, environmental protection and optimization of nature using modern tools, critically analyze the results of their own research and the results of other researchers in the context of the whole set of modern knowledge on the research problem;
- present freely and discuss in official and foreign languages in compliance with academic ethics research results, scientific and applied problems in ecology, environmental protection and optimization of nature, qualified to reflect research results in scientific publications in leading domestic and international scientific journals;
- to develop and teach special disciplines related to the subject area of ecology in higher education institutions;
- apply modern tools and technologies to search for processing and analysis of information on environmental issues and related issues, in particular, statistical methods of data analysis of large volumes and / or complex structures, specialized databases and information systems;
- have modern conceptual knowledge and a high methodological level in the field of ecology and on the borders of subject areas, as well as research skills sufficient for conducting scientific and applied research at the level of the latest world achievements.

2. Prerequisites and postrequisites of the discipline (place in the structural and logical scheme of education according to the relevant educational program)

The pedagogical practice is based on the knowledge gained by graduate students in basic professional disciplines and disciplines related with higher school pedagogy, sociology, etc. Pedagogical practice is the foundation for the formation of skills, abilities and skills of teaching in higher education. It allows to form an understanding of the key principles of preparation and conducting of various types of classes. Postgraduate students learn to prepare independently the necessary materials for the organization and conducting of lectures, seminars, practical and laboratory classes in various disciplines.

3. Content of practice

Pedagogical practice consists of the following stages:

- obtaining an individual task and schedule of practice, acquaintance with the program of practice;

- *undergoing instruction in undergraduate practice, instruction in safety;*
- *acquaintance with the basic normative documents regulating the organization and carrying out of educational process of department;*
- *detailed study of the material and technical base of practice;*
- *acquaintance with laboratories and classrooms where classes are held;*
- *attending lectures, practical and laboratory classes of specialized disciplines conducted by highly qualified teachers of the department;*
- *independent preparation and conducting of relevant classes in certain profile disciplines, which are defined in the individual task of the graduate student for pedagogical practice;*
- *conducting an objective self-assessment of the quality of the classes, taking into account the assessment of the graduate student's work by students of the groups where he conducted classes;*
- *preparation of a report and practice diary and passing a test on pedagogical practice.*

During the pedagogical practice, graduate students get acquainted in detail with the profile disciplines taught at the department. Together with the head of practice, for each graduate student profile disciplines of the department is selected, from which graduate students must prepare and conduct classes. The graduate student must attend classes of selected disciplines (lecture, seminar, practical and laboratory classes) conducted by teachers who teach these disciplines at the department. After that, graduate students, under the supervision of teachers of relevant disciplines, prepare and agree with the head of the practice plan of classes and begin to prepare material for lectures, internships, seminars and laboratory classes.

At the time agreed with the teachers, the graduate student conducts certain classes independently. Classes may be attended by the head of practice, a teacher of this discipline and other teachers and graduate students of the department. Laboratory work must be carried out together with the teacher of the relevant discipline.

Meetings with leading teachers of the department can be arranged for graduate students.

At the end of pedagogical practice, the graduate student conducts self-analysis of their own work. Obtained results are covered in the report on practice and reported at passing the test on pedagogical practice.

4. Training materials and resources

Basic literature

1. P.M. Shcherban. *Applied pedagogy: Teaching method. way.* - K.: Вища шк., - 2002. - 215 с.
2. *Pedagogy of higher school [Electronic resource]: textbook / V.P. Golovenkin; KPI them. Igor Sikorsky.* - 2nd ed., Reworked. and add. - Electronic text data (1 file: 3.6 MB). - Kyiv: KPI named after Igor Sikorsky, 2019. - 290 p.
3. Fitsula MM *Higher school pedagogy: Textbook. way.* - K.: "Akademvidav", 2006. - 352 p.
4. Nemchenko SG *Pedagogy of higher school: Textbook for students of higher educational institutions / S.G. Немченко, О.Б. Golik, OV Swan.* - Donetsk: LANDON-XXI, 2014. - 534 p.
5. Kalashnikov LM, Zhernovnikova OA *Higher school pedagogy in diagrams and tables: a textbook.* - Kharkiv, 2016. - 260 p.

Additional literature

6. Zgurovsky MZ *Status and objectives of higher education in Ukraine in the context of the Bologna Process.* - Kyiv: IPC "Polytechnic", 2004. - 76 p.
7. Vasilyuk A., Pakhotsinsky R, Yakovets N. *Modern educational systems: Textbook. way.* - Nizhyn: NDPU, 2002. - 139 p.
8. *Educational technologies: Training manual. / ed. OHM. Infantry.* - K.: «ACK», 2001. - 128 c.

Information resources of the Internet

9. Department of Psychology and Pedagogy KPI. Igor Sikorsky - <http://psy.kpi.ua/>
10. Working and educational programs in the profile disciplines of the Department of Ecology and Technology of Plant Polymers KPI. Igor Sikorsky - <https://eco-paper.kpi.ua>

Educational content

5. Methods of mastering of the discipline (educational component)

Lectures

In accordance with the individual task of the graduate student, he attends a lecture (if it is necessary - several lectures) of the relevant professional discipline together with students. Attending of lectures is aimed at acquainting of the graduate student with the specifics of teaching this discipline, acquaintance with a group of students.

During the pedagogical practice, the head of the practice can organize trips and excursions to other universities and organizations in order to get acquainted with modern approaches of the studying of specialized disciplines.

Practical, seminar and laboratory classes

The individual task of pedagogical practice of the graduate student must provide information on the professional disciplines from which the graduate student must prepare and conduct seminars, practical and (if it is possible) laboratory classes. To understand better the task and prepare better for classes, the graduate student can attend seminars and practical classes in certain disciplines. If the individual task of pedagogical practice provides conducting of laboratory lesson for the postgraduate student, prior visit of the graduate student of the laboratory lesson is mandatory.

6. Independent work of the graduate student

Independent work takes 100% of the time spent on pedagogical practice. The main task of independent work of graduate students is mastering of scientific knowledge in certain professional disciplines. The graduate student develops independently and prepares materials for lectures, seminars, practical and laboratory classes. In the process of independent work in the framework of pedagogical practice, the graduate student must learn to analyze deeply modern approaches of the organization and conducting of classes at the university.

Approximate distribution of working hours, days:

1	<i>Acquaintance with the practice program, calendar schedule. Obtaining of individual task. Passing of the instruction on the procedure for passing pedagogical practice and instruction on safety techniques</i>	1
2	<i>Attending of classes held by the department's teachers</i>	1
3	<i>Preparation for classes</i>	2
4	<i>Conducting of lectures, seminars, practical and laboratory classes</i>	4
5	<i>Excursion to other departments, other educational institutions and</i>	1
6	<i>Self-analysis of the completed work, preparation of a practice report</i>	1
7	<i>Passing of the offset and report on practice</i>	<i>after completing of practice</i>
8	<i>In all</i>	10

Before the start of pedagogical practice, each graduate student receives an individual task from the internship, which indicates which classes and from which profile disciplines he should conduct during the internship. Together with the teachers of the relevant disciplines, the graduate student agrees on the schedule of attendance and classes in each discipline. Pedagogical practice takes place according to the schedule drawn up by the head of the practice. The practice leader helps also to organize the preparation and conducting of classes. If it is necessary, the supervisor organizes additional consultations for graduate students with leading teachers.

The graduate student records in the diary all stages of the individual task. All materials for the preparation and conducting of classes, the results of Self-analysis are covered in the report.

7. The policy of the discipline (educational component) Rules of attendance and behavior in the classroom

Postgraduate students are obliged to take an active part in the educational process, not to be late for classes and not to miss them without good reason, not to interfere with the teacher to conduct classes, not to be distracted by actions not related to the educational process.

During self-study, the graduate student must adhere to all ethical standards.

The basis for pedagogical practice is the Department of Ecology and Technology of Plant Polymers of IHF KPI named after Igor Sikorsky. If it is necessary / possible, pedagogical practice can be fully / partially conducted at other departments of KPI named after Igor Sikorsky or in other universities.

The process of postgraduate pedagogical practice is constantly monitored by the head of practice. Once a week, the supervisor checks the stages of the individual task of the graduate student and the schedule of practice.

The last days of practice are set aside for processing and registration of all results of practice. The graduate student completes the internship diary, prepares a report on the internship.

The report should have 30 to 50 pages (A4 format) of printed text. The report is written on the basis of collected materials in accordance with the practice plan and individual tasks and consists of:

- introduction, which states the goals and objectives of the practice and selected ways to achieve them;*
- schedule of practice and individual task;*
- theoretical and other data used in preparation for classes in certain disciplines;*
- methods and means of quality control of classes;*
- results of assessment and self-assessment;*
- conclusions;*
- list of literary and technical sources of information.*

The reports describe specifically the work done personally by the graduate student. The report should have end-to-end page numbering. All report sheets must be sewn together.

The report is checked and approved by the head of practice.

Rules for assigning incentive and penalty scores

• incentive scores can be awarded by the teacher only for the performance of creative work in the discipline or additional online profile courses with a certificate:

- <https://prometheus.org.ua/courses-for-teachers/>.*

The maximum number of incentive scores may not exceed 20% of the rating scale.

- penalty points are not provided in the framework of pedagogical practice.*

Policy of deadlines and rearrangements

No later than one week after the end of pedagogical practice, the graduate student passes the offset on the practice to the commission, which consists of the head of the graduate student's practice, heads of other graduate students and teachers of the department. The composition of the commission is formed by the head of the department. To be admitted to the offset, the graduate student must fill out and sign a practice diary with the supervisor, prepare a report on the practice. Practical assessment is taken into account along with other assessments that characterize the success of graduate students. The results of the practice offset are entered in the examination information, put in the record book and in the journal of performance.

In the event of arrears or any force majeure, graduate students should contact with the teacher through available (provided by the teacher) communication channels to resolve issues and agree on an algorithm for practice.

The policy of academic integrity

Plagiarism and other forms of dishonesty are not allowed. Plagiarism includes the lack of links when using printed and electronic materials, citations, opinions of other authors. Inadmissible hints and write-offs at

writing tests, conducting classes; passing the offset for another graduate student; copying of materials protected by the copyright system without the permission of the author of the work.

The policy and principles of academic integrity are defined in Section 3 of the Code of Honor of the National Technical University of Ukraine "Kyiv Polytechnic Institute named after Igor Sikorsky". Details: <https://kpi.ua/code>

Policy of academic behavior and ethics

Postgraduate students must be tolerant, respect the opinion of others, formulate objections in the correct form, maintain constructively feedback in the classroom.

Norms of ethical behavior of students and employees are defined in Section 2 of the Code of Honor of the National Technical University of Ukraine "Kyiv Polytechnic Institute named after Igor Sikorsky". Details: <https://kpi.ua/code>

8.Types of control and rating system of assessment of learning outcomes (RSO)

Distribution of study time by types of classes and tasks according to the working curriculum:

Semester	Training time		Distribution of teaching hours				Control measures		
	Loans	acad. hours	Lectures	Practical	Lab. slave	IWS	MCT	RR	Semester control
3	2	60	-	-	-	60	-	-	test

The student's rating in the discipline consists of points that he receives for:

The rating of a graduate student in pedagogical practice consists from additional score that he receives during the practice and score that he receives at passing of the offset.

Semester control is offset.

For obtaining of credit score, the sum of all received rating scores is translated according to the table:

Scores	Rating
95 ... 100	perfectly
85 ... 94	very good
75 ... 84	fine
65 ... 74	satisfactorily
60 ... 64	enough
RD <60	unsatisfactorily
Admission conditions are not met	not allowed

Work program of the discipline (syllabus):

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Approved by the Department of E and TRP (Protocol № 14 of 08.06.2022)

According to the Methodical Commission of the Faculty (protocol No 10__ from __24.06.22__)