



## PEDAGOGICAL PRACTICE

Details of the discipline	
Level of higher education	<i>Third (educational-scientific)</i>
Field of knowledge	<i>17 Electronics and telecommunications</i>
Specialty	<i>172 172 Telecommunications and radio engineering</i>
Educational program	<i>Telecommunications and radio engineering</i>
Status of the discipline	<i>Normative</i>
Form of study	<i>Full-time (full-time)</i>
Year of preparation, semester	<i>2nd year, autumn semester</i>
The volume of the discipline	<i>2 credits - 60 hours</i>
Semester control / control measures	<i>Test</i>
Class schedule	<i>There are no classes</i>
Language of instruction	<i>Ukrainian</i>
Head of Practice	Head of Practice: Associate Professor Tsukanov Oleg, + 38095-012-7961, <a href="mailto:cukanov-o@ukr.net">cukanov-o@ukr.net</a>
Course placement	<a href="https://classroom.google.com/c/MzE2MjUzMjQ0MjA2?cjc=dpwbgjk">https://classroom.google.com/c/MzE2MjUzMjQ0MjA2?cjc=dpwbgjk</a>

### Curriculum

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

*The program of the educational component "Pedagogical practice" is made according to the educational-scientific program "Telecommunications and radio engineering" of preparation of the doctor of philosophy of a specialty 172 - Telecommunications and radio engineering. Pedagogical practice is obligatory component competencies. The program of pedagogical practice of graduate students covers the organizational and methodological principles of practical professional training of graduate students.*

#### 2. Organization of practice

*Duration of pedagogical practice - two weeks.*

*The organization and conduct of practice is regulated by the following documents:*

*Duration of pedagogical practice - two weeks.*

*The organization and conduct of practice is regulated by the following documents:*

- order on the university on the direction of practice and appointment of leaders;*
- work program (syllabus) of practice;*
- diaries and individual tasks for practice;*
- journal of practice visits;*
- schedules of visits by practice managers to exercise control;*
- reports on the implementation of the internship program;*
- examination information on the test in practice.*

*Responsibility for the organization, conduct and control of internships rests with the head of the department. To lead the practice, the head of the department is appointed by the heads of practice from the department.*

*The head of practice from the department must:*

- hold meetings with graduate students and acquaint them with the work program of practice;
- to publish diaries with individual tasks and calendar plan of practice;
- control the practice;
- systematically, at least once a week, to advise graduate students and monitor the stages of implementation of the individual plan according to the calendar plan;
- Participate in taking tests in practice;
- draw up a logbook, as well as conduct safety briefings;
- submit to the dean's office a report on the results of the practice with proposals for its improvement.

The results of the practice must be discussed at the meetings of the department and the meetings of the Academic Council of the Institute of Telecommunication Systems.

Pedagogical practice begins with an inaugural conference, which is attended by applicants, head of practice from the graduating department, supervisor. The place of postgraduate practice is the graduating department.

Postgraduate students are acquainted with the rector's order, program and tasks of practice, duration of working hours in practice, internal regulations and safety rules, which are recorded in the record sheet of safety briefing and reporting form.

At the first stage, graduate students get acquainted with the regulations governing the organization of the educational process at the institute; with the structure and system of organization of the educational institution and the department where they will undergo pedagogical practice; with the system of educational work of the department, features of methodical, scientific and organizational work of teachers of the department, with the student audience with which they will conduct classes; attend classes of teachers; prepare their own schedule of classes and inform the head of the practice.

At the final stage of the internship there is a final conference with a discussion of the results of classes, preparation of a report by graduate students on the results of the internship, its defense and credit.

### 3. Content of practice and individual work plan

60 hours / 2 ECTS credits are allocated for pedagogical practice, semester attestation - credit.

#### **Recommended distribution of study time**

<b>No</b>	<b>The name of the topic</b>	<b>Hours in general</b>	<b>Lecture classes</b>	<b>Independent work</b>
<b>I. Organizational stage</b>				
1.	Introductory conference	2	2	-
2.	Acquaintance with the normative documents regulating the organization of educational process in higher educational institutions	6	-	6
3.	Acquaintance with the structure and system of organization of the department; with the system of educational, methodical,	2	-	2

	<i>scientific and organizational work of teachers of the department</i>			
4.	<i>Development of an individual schedule of training sessions and attending classes of graduate students-trainees</i>	2	-	2
	<b>Together</b>	<b>12</b>	<b>2</b>	<b>10</b>
<b>II. Pedagogical stage</b>				
1.	<i>Preparation of plans-summaries of training sessions, their coordination and approval with the head of practice</i>	20	-	20
2.	<i>Conducting open classes for graduate students (1 lecture and 1 (2) laboratory / practical lesson)</i>	10	4	6
3.	<i>Self-analysis and discussion of the classes with the head of the practice and other graduate students</i>	2	2	-
	<b>Together</b>	<b>32</b>	<b>6</b>	<b>26</b>
<b>III. The final stage</b>				
1.	<i>Final conference</i>	4	2	2
2.	<i>Preparation of a report on the results of the internship</i>	6	-	6
3.	<i>Credit lesson. Protection of the report on the results of the internship</i>	6	2	4
	<b>Together</b>	<b>16</b>	<b>4</b>	<b>12</b>
	<b>Hours in general</b>	<b>60</b>	<b>12</b>	<b>48</b>

*The main stage of pedagogical practice of graduate students involves the following tasks:*

- planning of the postgraduate student's own teaching activity;*
- preparation for classes (preparation of plans-summaries of classes and their methodological support);*
- conducting classes, self-analysis, detailed analysis and discussion of the lesson;*
  - attending classes of graduate students-interns.*

*During the pedagogical practice of the graduate student it is necessary to prepare and conduct, as a rule:*

- one lecture;*
- one (two) laboratory / practical lesson.*

*The structure and content of each lesson must meet the requirements for the appropriate form of organization of education, as well as meet the thematic curriculum of the relevant credit module.*

*These types of classes are conducted by graduate students according to the schedule in the assigned academic group according to the established schedule. The head of the internship and other postgraduate interns may be present at the graduate students' classes.*

*After attending each of the classes conducted by other graduate students, there is a discussion and a thorough psychological and pedagogical analysis, which reveals the advantages and*



### **Individual internship plan**

<b>Content of work</b>	<b>Day</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>The first week</b>					
<i>Familiarity with the organization of educational</i>					
<i>Drawing up an individual plan of practice</i>					
<i>Choice of topic, development of the content of educational classes and its methodical preparation</i>					
<i>Independent training</i>					
<b>The second week</b>					
<i>Independent training</i>					
<i>Preparation of a report on pedagogical practice</i>					
<i>Postgraduate students' defense of the report on pedagogical practice</i>					

#### **5. Requirements for the report**

*The report on the pedagogical practice must have information on the implementation of all sections of the practice program in accordance with the individual plan of the graduate student. The report must be signed and evaluated by the head of the practice. The report must provide a quantitative and qualitative analysis of the work done.*

*The report should consist of an introduction, main part, conclusions, list of sources and appendices.*

*The main part contains 3 sections:*

*- acquaintance with the organization of the educational process in higher education. The section should provide a description of the documents that guide the department in its current work, a brief description of the Law of Ukraine on Higher Education.*

*- Independent training of trainees. Provide a list of classes, methodological development of classes (lecture content, lecture text, list of sources used; content of laboratory (practical) classes, course, assignments for independent work, list of sources used).*

*- self-analysis and assessment of the quality of one's own lesson.*

*Forms of reporting documentation are given in appendices A, B, C, D.*

#### **6. Forms and methods of control**

*The current and final control over the implementation of the internship program by graduate students is carried out by the head of the internship from the department. The internship diary is the main document of the graduate student during the internship. During the internship, the graduate student must briefly write down in diary every day everything he did during the day to fulfill the calendar schedule of the internship. Here in the general sequence reflects the activities of socio-political practice. He keeps detailed records in workbooks, which are a continuation of the diary. At least once a week, the graduate student is required to submit the diary for review to the heads of practice from the university and the company, who check the diary, give written comments,*

additional assignments and sign the records made by the graduate student. At the end of the internship, the diary together with the report should be reviewed by the interns, who compile feedback and sign it. The completed diary together with the report must be submitted by the graduate student to the department. Without a completed diary, the practice is not credited.

**Pedagogical practice** ends with a final test.

The derivation of the grade for the internship for each postgraduate intern takes place in the test session after he / she has completed all the tasks in accordance with the plan of pedagogical practice.

Each graduate student must submit a package of reporting documentation for the test, which includes:

1. General report on the internship.
2. Response of the head of practice from the department.
3. Properly designed practice diary.

The head of the department is appointed by the commission for receiving reports on practice. The commission consists of the head of practice from the department and the research supervisor of the graduate student. The commission accepts the test within the first ten days after the end of the internship. The grade from practice is entered in the record sheet. The report on practice is stored at the department for three years. The report on pedagogical practice is stored in the individual plan of the graduate student and is considered during certification.

The results of each practice are discussed at a meeting of the department, and the general results of the practice are summed up at a meeting of the Academic Council of the Institute of Telecommunication Systems.

## **7. Evaluation criteria**

**A rating system (RS) is used to assess the success of graduate students. RS takes into account:**

- development of two plans-summaries of the lecture;
- development of two plans-summaries of laboratory (practical) classes;
- conducting classes according to the pedagogical workload;
- preparation and protection of reporting documentation.

### **System of rating (weight) points**

#### **Development of plans-summaries of lectures**

Weight score - 14

The maximum number of points for the development of syllabi for lectures is equal to  $7 \text{ points} \times 1 \text{ lectures} = 14 \text{ points}$ .

#### **Development of plans-summaries of laboratory (practical) classes**

Weight score - 14

The maximum number of points for the development of plans-summaries of laboratory (practical) classes is equal to  $7 \text{ points} \times 1 \text{ laboratory / practical lesson} = 14 \text{ points}$ .

#### **Lectures**

Weight score - 30 points

The maximum number of points for conducting lectures for the period of practice is equal to  $30 \text{ points} \times 1 \text{ lecture} = 30 \text{ points}$ .

### **Laboratory (practical) classes**

Weight score - 30.

The maximum number of points for laboratory (practical) classes for the period of practice is equal to 30 points × 1 laboratory (practical) lesson = 30 points.

### **Preparation and protection of reporting documentation**

Weight score - 12.

The maximum number of points for training and defense is equal 12 points × 1 report. = 12 points

### **Calculation of the scale (R) rating**

The sum of weight points of control measures during practice is:

$$R_c = 7 \times 2 + 7 \times 2 + 30 \times 2 + 30 \times 2 + 12 \times 1 = 100 \text{ points.}$$

The rating scale is equal to 100 points.

According to the results of pedagogical practice, the graduate student receives the appropriate grades (ECTS and traditional) (table 1.)

table 1.

<b>Rating points</b>	<b>Rating</b>
95-100	<b>"Perfectly"</b>
85-94	<b>"Very good"</b>
75-84	<b>"Fine"</b>
65-74	<b>"Satisfactorily"</b>
60-64	<b>"Enough"</b>
$R_D \leq 59$	<b>"Unsatisfactorily"</b>
<i>R<sub>c</sub> &lt; 39 or other conditions of admission to the test are not met</i>	

The results of pedagogical practice are recorded by the head of practice in the test-examination list.

A graduate student who has not completed the internship program and received an unsatisfactory response from the head of the internship or heads of departments or received an unsatisfactory grade, is sent to the internship again, he re-transmits the internship according to the established procedure.

## **8. Recommended literature**

### **Regulations:**

1. Закон України про вищу освіту. Закон від 01.07.2014 № 1556-VII [Електронний ресурс]. – Доступний <http://zakon1.rada.gov.ua/laws/show/1556-18>
2. Роз'яснення МОН щодо деяких питань практичної реалізації положень нового Закону України «Про вищу освіту» : [Електронний ресурс]. – Режим доступу: [http://www.kmu.gov.ua/control/publish/article7art\\_icN247526620](http://www.kmu.gov.ua/control/publish/article7art_icN247526620).
3. Моніторинг інтеграції української системи вищої освіти в Європейський простір вищої освіти та наукового дослідження: моніторинг, дослідж. : аналіт. звіт / Міжнарод. благод. фонд



- «Міжнарод. фонд дослідж. освіт, політики» ; за заг. ред. Т.В. Фінікова, О.І. Шарова. – К. : Таксон, 2014. – 144 с.
4. Стратегія реформування вищої освіти в Україні до 2020 року (проект). – [Електронний ресурс]. – Режим доступу: [http://www.mon.gov.ua/img/zstored /files/HE%20Reforms%20Strategy%2011\\_11\\_2014.pdf](http://www.mon.gov.ua/img/zstored/files/HE%20Reforms%20Strategy%2011_11_2014.pdf).
  5. Положення про навчання студентів та аспірантів, стажування наукових і науково-педагогічних працівників у провідних вищих навчальних закладах та наукових установах за кордоном, затверджене Постановою Кабінету Міністрів України від 13 квітня 2011 року № 411 – [Електронний ресурс]. – Режим доступу: <http://zakon4.rada.gov.ua/laws/show/411-2011-%D0%BF>.
  6. Національна доктрина розвитку освіти України у XXI столітті // Освіта України, 2001, № 29.
  7. Положення про проведення практики студентів вищих навчальних закладів України: Наказ Міністерства освіти України від 8 квітня 1993 р. № 93.
  8. Методичні рекомендації по складанню програм практики студентів ВНЗ України. – Київ, 1996: Лист МОН України № 31-5/97 від 14.02.1996.

#### **Basic:**

1. Положення про організацію освітнього процесу в КПІ ім. Ігоря Сікорського. – 2020. [Електронний ресурс] – Режим доступу: <http://osvita.kpi.ua/node/39>
2. Методичні рекомендації з питань організації практики студентів та складання робочих програм практики Національного технічного університету України «Київський політехнічний інститут імені Ігоря Сікорського» [Текст] / Уклад.: Н. М. Лапенко, І.Л. Співак, І.В. Федоренко, О.М. Шаповалова; за заг. ред. П.М. Яблонського. – К.: КПІ ім. Ігоря Сікорського, 2018. – 29 с.
3. Головенкін В.П. Інженерна педагогіка (електронне видання): Підручник. – К.: НТУУ «КПІ ім. Сікорського», 2017. [Електронний ресурс]. – Режим доступу: <http://www.kpi.ua/>.
4. Головенкін В.П. Педагогіка вищої школи (Андрагогіка): Підручник. – К.: НТУУ «КПІ», 2009. – 406 с.
5. Кузьмінський А.І. Педагогіка вищої школи : навч. посіб. / А.І. Кузьмінський. – 2-ге вид. – К. : Знання, 2011. – 486 с.
6. Начаєв В.М. Методика викладання у вищій школі : навч. посіб. / В.М. Начаєв. – К.: Центр учбової літератури, 2007. – 232 с.
7. Подоляк Л.Г. Психологія вищої школи: Навчальний посібник для магістрантів і аспірантів / Подоляк Л.Г., Юрченко В.І. – К.: ТОВ «Філ-студія», 2006. – 320с.
8. Товкамець Г.В. Університетська освіта. навчально-методичний посібник / Укладач: к.п.н. Товкамець Г.В. – К.: Кондор, 2011. – 182 с.
9. Філософія педагогічної майстерності : Зб. наук. праць./ Інститут педагогічної освіти і освіти дорослих АПН України, Вінницький державний педагогічний університет імені М. Коцюбинського / Ред. кол.: Н.Г. Ничкало (голова) та ін. – Київ-Вінниця : ДОВ «Вінниця», 2008. – 380 с.

#### **Additionally:**

1. Артемова Л.В. Педагогіка і методика вищої школи: навчально-методичний посібник. – К.: Кондор. – 2008. – 272 с.
3. Звіт за результатами соціологічного опитування “Соціально-економічний та професійний портрет українського викладача”. – К., Центр дослідження суспільства, 2013. – [Електронний ресурс]. – Режим доступу: [http://www.cedos.org.ua/system/attachments/files/000/000/002original/csr\\_-\\_teachers\\_-\\_report\\_-\\_final.pdf?1386338539](http://www.cedos.org.ua/system/attachments/files/000/000/002original/csr_-_teachers_-_report_-_final.pdf?1386338539).



4. Зязюн І.А. Краса педагогічної дії: навчальний посібник / І.А. Зязюн, Г.М. Сагач. – К.: Вища школа, 1997. – 349 с.
5. Головка Л. Активізація самостійної роботи студента під час лекційних занять / Л.Головка // Освіта і управління. – Т.5. – № 3. – 2002. – С. 147–151.
6. Кузьмінський А.І. Педагогіка: завдання і ситуації: практикум / А.І. Кузьмінський, Л.П. Вовк, В.Л. Омеляненко. – К.: Знання-Прес, 2003. – 429 с.
7. Мороз О.Г. Перші кроки до майстерності / О.Г. Мороз, В.Л. Омеляненко / Відп. ред. В.Й. Верба. – К.: Знання України, 1992. – 112 с.
8. Мойсеюк Н.Є. Педагогіка: навч. посібник/Н.Є. Мойсеюк.– 4-е вид. –К.: Либідь, 2003. – 615 с.
9. Слєпкань З.І. Наукові засади педагогічного процесу у вищій школі. – К.: Вища школа, 2005. – 239 с.
10. Стрельников В. Компоненти професійної компетентності викладача вищої школи / В. Стрельников // Гуманітарний вісник. – 2013. – № 28. – С. 278–285.
11. Ортинський В. Л. Педагогіка вищої школи: навч. посібник / В. Л. Ортинський. – К. : Центр учбової літератури, 2009. – 472 с.
12. Цехмістрова Г.С. Управління в освіті та педагогічна діагностика: навч. посіб. / Г.С. Цехмістрова. – К.: ВД “Слово”, 2005. – 280 с.

**Work program of pedagogical practice (Syllabus):**

**Compiled by** Ph.D., Associate Professor Tsukanov Oleg Fedorovich

**Approved by** the Department of Telecommunications (prot. № 13 of 22.05.2020)

**Approved by** the ITS Methodological Commission (prot. № 3 of 09.06.2020)