



Syllabus of the educational discipline «Operating Systems»

Specialty	<i>121 "Software Engineering"</i>
Educational program	<i>Software Engineering</i>
Level of education	<i>The first (Bachelor) level of higher education</i>
Discipline status	<i>Mandatory</i>
Teaching language	<i>English</i>
Course / semester	<i>2 year, 3 semester</i>
Number of credits ECTS	<i>4</i>
Distribution by types of trainings and hours of study	<i>Lectures – 16 hours. Practical studies (seminars) – 0 hours. Laboratory studies – 32 hours. Self-study – 72 hours.</i>
Form of final assessment	<i>Grading</i>
Department	<i>Information System, Room 413 (Main Building), (057)702-18-31, https://kafis.hneu.net/</i>
Teacher (-s)	<i>Oleksandr KOLGATIN, professor of the Information System Chair, doctor of pedagogical science, PhD in technical science</i>
Teacher's contacts	<i>Kolgatin O.: Oleksandr.Kolgatin@hneu.net</i>
Days of the classes	<i>According to the schedule</i>
Consultations	<i>According to the schedule at the Information System Department, chat PNS</i>
The purpose of the discipline is forming the system of special knowledge on theoretical foundations of construction, principles of design, configuration and application of modern operating systems that provide computational processes in information systems of economic, managerial, production, scientific and other fields, as well as providing practical skills of operating system administration.	
Prerequisites for learning: <i>Programming / Knowledge and skills in basics of application program, skills to understand code. Introduction to Major / Knowledge and skills in basics of ICT, skills to operate files, office software</i>	
Content of the educational discipline	
Content module 1 <i>Operating System Concepts</i> Theme 1 Basic concepts, evolution, types of operating systems Theme 2 Architecture and resources of operating systems Theme 3 Multitasking. Scheduling and interaction of processes and threads Theme 4 RAM management Content module 2 <i>Operating System Administrating</i> Theme 5 Operating system booting. File systems Theme 6 System Registry Theme 7 Executable files. System services and drivers Theme 8 Information security in operating systems	
Material and technical support (software) of the discipline <i>(see personal training system)</i>	
Course page on the Moodle platform (personal training system)	https://pns.hneu.edu.ua/
Learning outcomes assessment system The system of assessment of the formed learning outcomes in the course is carried out on	



the basis of assessment of tasks during lectures, laboratory classes, as well as the performance of self study. Assessment of student learning outcomes is carried out on a cumulative 100-point system. The current control, which is carried out during the semester during laboratory classes and self study, is estimated by the sum of points scored. The maximum possible number of points for the current and final control during the semester - 100 and the minimum possible number of points - 60.

More detailed information on assessment is given in the technological map of the course.

Course policies

The teaching of the course is based on the principles of academic integrity. Violations of academic integrity are: academic plagiarism, fabrication, falsification, write-off, deception, bribery, biased evaluation. For violation of academic integrity, students are brought to the following academic responsibility: re-assessment of the relevant type of educational work

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, independent training is given in the Syllabus (working plan) of the educational discipline

Syllabus approved at the meeting of the Department «Information Systems». Protocol №17 from June 10, 2022