

Syllabus of the educational discipline

«OPERATING SYSTEMS»

Cycle of Higher Education	<i>First cycle of higher education (Bachelor's degree)</i>
Field of Study	<i>12 Information Technologies</i>
Specialty	<i>123 Computer engineering</i>
Educational program	<i>Computer systems and networks</i>
Discipline status	<i>Compulsory</i>
Teaching language	<i>English</i>
Year of studies, semester	<i>3 year (5 semester)</i>
Number of credits ECTS	<i>4 credits</i>
Distribution by types of trainings and hours of study	<i>Lectures, Laboratory studies, Independent training</i>
Form of final assessment	<i>Test</i>
Teacher	<i>Korol Yu.Yu., associate professor of the department of computer systems and network</i>
Teacher's contacts	<i>yuriy.korol@uzhnu.edu.ua</i>
Course Schedule	<i>According to the timetable</i>
<p><i>The purpose of the course is to provide students with the knowledge and skills of modern operating systems, their rational use, as well as the practical skills of effective use of modern operating systems in the process of functioning of the organization.</i></p> <p><i>As a result of studying the discipline the student must:</i></p> <p><i>know:</i></p> <ul style="list-style-type: none"> <i>- understanding of the basic regulations underlying the organization of operating systems.</i> <i>- ability to classify operating systems</i> <p><i>be able to:</i></p> <ul style="list-style-type: none"> <i>- manipulate with basic commands and file structure elements of Linux and Windows operating systems, control multiprogram operating system processes</i> 	
<p>Prerequisites for learning Programming, Systems Programming, Discrete Mathematics</p>	
<p>Content of the educational discipline</p> <p>Topic 1. OS of single-processor and multiprocessor CS</p> <p>Topic 2. Process and stream management</p> <p>Topic 3. RAM management</p> <p>Topic 4. File Systems</p> <p>Topic 5. I/O control</p> <p>Topic 6. Downloading, installing and exploiting the operating system</p>	
<p>Course page on the Moodle platform (personal training system)</p>	
	<p><i>Syllabus of the educational discipline, hyperlinks to electronic publications of the discipline, recommended literature, students' attendance, lecture materials, presentations, questions for self-control, methodical materials for laboratory works, tests, tasks for checking students' knowledge. https://moodle.uzhnu.edu.ua</i></p>
<p>Recommended literature</p>	
<ol style="list-style-type: none"> <i>1. Gerardus Blokdyk Network operating system A Complete Guide. - 5STARCOoks, 2021. - 317p.</i> <i>2. Andrew Tanenbaum Modern Operating Systems. - Pearson; 4th edition, 2014. - 1136p.</i> <i>3. Abraham Silberschatz Operating System Concepts. - Wiley; 10th edition, 2021. - 1040p.</i> 	
<p>Assessment system of learning outcomes</p>	
<p><i>The ECTS grade that a student receives after studying a credit module of a discipline is determined according to the student's rating. A student's credit module rating consists of the points the student receives during the semester for the following types of work:</i></p> <p><i>1. Modular control work (MCW) duration of 2 acad. hours each. The maximum number of points</i></p>	

for the MCW is 50 points.

2. Performance of laboratory works.

During the semester, students perform laboratory works(maximum number of points - 40)

Scores on individual and independent work of students are awarded for: preparation of essays, modernization of tasks, creative approach to task performance, performance of tasks to improve didactic materials on the discipline: 0-10 points for each module.

Each module is assessed a maximum of 100 points. At the end of the discipline a rating score is derived as the arithmetic average of the points from the two modules.

ECTS and national grading scale			
Mark scale	ECTS	Exam	Test
90 - 100	A	Excellent	Satisfied
82 - 89	B	Good	
74 - 81	C		
64 - 73	D	Satisfactory	
60 - 63	E		
35 - 59	FX	“Unsatisfactory” with possibility to pass the exam again	“Not satisfied” with possibility to pass the exam again
1 - 34	F	“Unsatisfactory” with obligatory repeated study of the discipline	“Not satisfied” with obligatory repeated study of the discipline