

## **OPERATING SYSTEMS**

(name of the discipline)

### **ANNOTATION**

#### **TO THE CURRICULUM OF THE INSTITUTION OF EDUCATION**

**Specialty-6-05-0611-01 Information systems and technologies**

	Form of higher education		
	Full-time (daytime)	Extramural	Extramural abbreviated
Course	2		
Semester	3		
Lectures, hours	34		
Laboratory classes, hours	16		
Report, semester	3		
Classroom hours per academic discipline	50		
Independent work, hours	58		
Total hours per academic discipline / credit units	108/3		

#### **1. Brief content of the discipline**

Teaching students to work in modern operating systems, algorithms used in operating systems.

#### **2. As a result of mastering the academic discipline, the student must know:**

- structure, basic principles of construction and operation of operating systems; principles of single-tasking and multi-tasking operation of operating systems (OS), methods of organizing parallel development and synchronization of processes; -element base and structure of the main software and hardware modules of the computer; the architecture of the main file systems supported by the OS, methods of interaction with architectural elements and maintaining the integrity of file systems; input/output devices and software; tools and methods for organizing virtual memory, organizing work with shared memory, simple memory management schemes; organization of network operating systems, main problems of information security, methods and protective mechanisms of operating systems.

#### **be able to:**

use OS tools; use system control commands; use the OS electronic help service; work as an OS user; install and configure the OS, create the simplest local complexes based on network OS; develop programs that expand the capabilities of the OS.

#### **has a skill:**

computer skills and technology in modern operating systems; techniques for installing and configuring operating systems and software; command languages and methods for managing the tools of the operating systems used; organization, creation and maintenance of file systems used by the OS.

#### **3. Formed competencies**

Possess the principles and basic skills of techniques, methods of setting up, adapting and maintaining software.

#### **4. Requirements and forms of current and intermediate certification.**

Defence of laboratory works – current, oral -written, credit – intermediate, oral -written