

Discipline	COMPUTER PERIPHERAL	code: 36	summer semester
Specialty	Computer Systems and Technologies		
ECTS credits: 6	Form of assessment: exam		
Lecturer	Assoc. Prof. Zheyno Zheyrov, PhD Room 407 A TB Phone: +359 52 383 260 E-mail: zh_viv@tu-varna.bg		
Department	Computer Science and Engineering		
Faculty	Faculty of Computing and Automation		
<p>Learning objectives:</p> <p>The subject is intended to give some theoretical knowledge about the application of the computer peripheral and the ways and means of its management. It has to form practical habits in the students for its use. For this purpose, the principles, technologies and means of storing, entering and outputting information in computer systems are discussed. Ways to test the performance and device parameters are considered.</p> <p>The main representatives of a class of peripheral devices and the standard interfaces for connecting them to computer systems are studied. The basic software features are considered to ensure the proper functioning of peripheral devices in the computer configuration.</p>			
CONTENTS:			
Training Area		Hours lectures	Hours seminar exercises
Computer peripheral. Purpose and basic functions. Classification. Organization of the data exchange in the computer. Organization of PC input / output.		2	2
Computer peripheral interfaces. Classification. Parallel interfaces. LPT port on PC. Serial interfaces. COM port. Interfaces USB, IEEE1394.		2	2
Information media. Input devices. Principle of recording and reading information on the media.		3	3
Keyboard. Standard PC keyboards. Principle of operation and interfaces.		3	3
Graphics input devices - digitizers, color scanners. Mouse, trackball, joystick, touch screen.		3	3
Bar codes. Bar code readers. Digital cameras.		3	3
Printers. Characteristics. Print engines. Impact printers. Dot-Matrix printer. Inkjet printers.		2	2
Laser printers. Thermal printers. Color print technologies. Development of the printers.		2	2
Graphical output devices. Plotters, photo plotters. Principle of operation. Basic blocks and modes of operation.		2	2

Devices for registration information via visualization. Video Terminals. Principle of operation. Types and parameters.	2	2
Liquid crystal displays. Technologies and standards. Projection systems.	2	2
Magnetic media. Digital magnetic recording. Heads. Recording and reading of digital information on a magnetic media. Recording methods. Encoding of information.	2	2
External storage devices. Hard disk. Basic blocks and principle of operation. Parameters. Standard interfaces ATA, SCSI. Solid-State Drive.	2	2
Optical storage. Principle of operation, functional blocks and interface. CDs, DVDs and Blue-ray discs and devices. Optical storage development	2	2
TOTAL: 60 h	30	30