

DESCRIPTION OF THE STUDY SUBJECT

Title

IMPLEMENTATION AND MAINTENANCE OF INFRASTRUCTURE OF WORKGROUP SYSTEM SERVER

Scope of the subject

Semester	Mode of studies	Structure*				Total number of hours	Number of credits	Group and type of subjects
		L	Lw	C	S			
VI	Full-time	24	42	12	84	162	6	Subjects for deepening in the branch
VII	Part-time	10	26	42	84	162	6	

*L – lectures, PS – practical activities, seminars, LW – laboratory work, PR – practice, CP – course paper, C – consultations, S – self-study

Aim of the subject

To understand operating principles of groupware systems, to create, modify and manage databases. To be able to install, maintain, manage and update groupware systems, be able to administer users, databases, services.

Necessary background knowledge for studying the subject

Students shall have heard the subjects basics of programming, computer networks and telecommunications, management of operating systems, computer hardware.

Content of the subject

Title of the topic and description of the content	Number of contact hours			S	Total number of hours
	L	Lw	C		
1. The concept of the groupware system (GS), its main elements. Preparation of Linux operating system. Installation and adjustment of GS server. Installation and adjustment of databases and Internet services.	4	-	-	2	6
Laboratory work No.1. Preparation of Linux server for installation. Installation, adjustment of GS, its preparation for work.	-	6	1	8	15
Preparation for defence of laboratory works and their defence No. 1	-	2	1	6	9
2. Preparation of Windows operating system. Installation and adjustment of GS server in Windows operating system. Description of parameters, installation and adjustment of services.	5	-	-	2	7
Laboratory work No. 2. To adjust Windows server, to install Microsoft GS, to adjust it, to prepare for work.	-	6	1	8	15
Preparation for defence of laboratory works and their defence No. 2	-	2	1	6	9
3. Adjustment of customers and services, testing and administration in GS. Preparation of GS for work.	7	-	-	2	9
Laboratory work No.3. To prepare GS for work installed in Linux operating system.	-	6	1	4	11
Laboratory work No.4. To prepare GS for work installed in Windows operating system.	-	4	1	4	9
Preparation for defence of laboratory works and their defence No. 3	-	2	-	12	14
4. Maintenance of GS, upgrading of the server, assurance of integrity of information, security.	5	-	-	2	7
Laboratory work No.5. To harmonise security assurance solutions of GS installed in Windows and / or Linux operating systems.	-	6	2	8	16
5. Cloud computing solutions in GS.	3	-	2	8	13
Laboratory work No.6. To implement GS solutions in virtual cloud computing servers.	-	6	1	6	13
Preparation for defence of laboratory works and their defence No. 4	-	2	1	6	9
Total number of hours	24	42	12	84	162

Assessment of learning outcomes

Ten-point criteria-based assessment system as well as cumulative assessment using individual cumulative index (ICI) are applied. The overall grade consists of marks for the defence of laboratory works (DLw) multiplied by weighted coefficients.

$$ICI = 0,25 DLw1 + 0,25 DLw2 + 0,25 DLw3 + 0,25 DLw4$$

Recommended literature

Key literature						
No.	Year of publishing	Author(s) and title of the publication	Publishing house	Number of copies and/or internet link		
				ŠSC library	Other premises	Other libraries *
1.	2011	Skersys G. Informacijos sauga.	TEV	https://www.ebooks.ktu.lt/eb/237/informacijos-sauga/		
2.	2006	Skvernys V., Patašienė I. ir kt. Informacijos išteklių naudojimas.	Vitae Litera	https://www.ebooks.ktu.lt/eb/400/informacijos-istekliu-naudojimas		
3.	2006	Sarafinienė N., Pocius K. UNIX, Mokomoji knyga	Technologija	3	-	-
Additional literature						
No.	Year of publishing	Author(s) and title of the publication	Publishing house and/or internet link			
1.	2015	Kaklauskas L. Nuotolinis kursas – „Grupinio darbo sistemos serverio infrastruktūros diegimas ir priežiūra“	http://moodle.svako.lt			
2.	2011	Sarafinienė N. Operacinės sistemos, Mokomoji knyga	Technologija			
3.	2005	Bareiša E., Krivickas J., Motiejūnas K. ir kt. Programinės įrangos projektų valdymas	https://www.ebooks.ktu.lt/eb/168/programines-irangos-projektu-valdymas			
4.	2004	Rapševičius V. UNIX	Vilniaus Universiteto leidykla			

* ŠAVB – Šiauliai Region Povilas Višinskis Public Library, ŠU – library of Šiauliai University

Required material resources and their short description

<ul style="list-style-type: none"> • Equipment (devices): computer laboratory (16 units), computers connected into a local network and connected to the Internet, multimedia projector, printer. • Software: Windows 2008 or 2012 or a later Server version, open code Linux operating system, open code GS system.

The description prepared by:

Lecturer Donatas Daugirdas