Course title: Cloud Linux

Course code: 61041

ECTS credits: 6

Requirements: None

Basic information

Level of studies: Undergraduate applied studies

Year of study: 3

Trimester: 7

Goal: Broadening knowledge acquired in the Linux System Administration course and performing complex tasks in server and workstation administration.

Outcome: Students should be able to perfom complex tasks in administration and optimization of server performance as well as of the other elements of a computer network in Linux environment.

Contents of the course

Theoretical instruction

1. Adding a computer to a network

2. IP address assignment

3. Network interface configuration

4. Configuring static routes

5. Linux network configuration - various Linux distributions

6. Network file system

7. Firewall

8. Managing printers

9. Installing and configuring Samba

10. DNS server configuration

11. DHCP server configuration

12. Installing and configuring Linux mail server

13. Linux cert management

14. System monitoring

15. Network Diagnostics

16. Virtualization

Practical instruction (Problem solving sessions/Lab work/Practical training)

1. Linux networking tools

2. Managing printers

3. Installing and configuring DHCP server

4. Installing and configuring DNS

5. Sendmail configuration

6. System security

7. Linux containers and virtualization

Textbooks and References

1. Evi Nemeth, Garth Snyder, Trent R. Hein, Linux Administration Handbook, Prentice Hall

2. Nick Wells, The Complete Guide to Linux System Administration (Paperback), Course Technology Ptr, 2004.

3. By Olaf Kirch , Terry Dawson, Linux Network Administrator's Guide, 2nd Edition, O'Reilly, 2000.

4. Benjamin Mako Hill, Jono Bacon, Ubuntu Official Guide, CET, Belgrade, 2008.

Number of active classes (weekly)

Lectures: 4

Practical classes: 2

Other types of classes: 1

Grading (maximum number of points: 100)

Pre-exam obligations: Points

Activities during lectures:

Activities on practical exercises: 20

Seminary work: 10

Colloquium: 20

Final exam: Points

Written exam: 50

Oral exam:

Lecturer: Goran Zajić, PhD

Associate: Slobodan Čabarkapa