

		Course title: <i>Operating systems</i>		
Course code	Course status	Semester	Number of ECTS credits	Lecture hours
<i>PA2204</i>	<i>Elective</i>	<i>II</i>	<i>5</i>	<i>3P+1L</i>

Study program:

Postgraduate master studies, ELECTRICAL ENGINEERING, study program: Electronics, Telecommunications and Computer engineering (studies last for 10 semesters, 300 ECTS credits).

Prerequisites:

No prerequisites required.

Course aims:

Students will be introduced with features of the modern OS, structure and features of different operating system (Windows, Unix, Linux...), Distributed operating systems, clusters, GRID infrastructure.

Teacher(s) first and last names: Ph.D. Božo KRSTAJIĆ

Studying method:

Lectures, exercises, laboratory exercises, individual work on practical tasks, consultations.

Course synopsis:

Preliminary week	Preparation and semester enrolment.
I week	Introduction, Features and parts of the modern OS.
II week	Comparison analysis of the performances of OS.
III week	Virtual machines.
IV week	Client server model OS.
V week	Embedded OS
VI week	I colloquium.
VII week	Free week
VIII week	Distributed operating systems.
IX week	Clusters and middleware.
X week	Term, function and structure of GRID.
XI week	Monitoring and management
XII week	Security of OS.
XIII week	II colloquium
XIV week	Current administration OS
XV week	Directions of the development of OS
XVI week	Final exam.
Final week	Additional lessons, correction of the final exam and administrative procedures.
XVIII-XXI week	

STUDENT WORKLOAD

<u>per week</u>	<u>per semester</u>
Working hours: 5 credits x 40/30 = 6 h 40min.	Teaching and the final exam: (6hours) x 16 = 106h 40min.
Working hours structure: 3 hours for teaching 1 hour for exercises 2h 40min hours for individual work, including consultations.	Necessary preparation (before semester): 2 x (6h 40min) =13hours 20min. Total work hours for the course: 150hours Additional hours for preparing correction of the final exam, including the exam taking: up to 36hours. Work hours structure: 106h 40min (lectures) + 13hours 40min (preparation) + 30hours (additional work)

Lessons attendance is mandatory for students, as well as doing homeworks and seminar works, etc.

Literature: - A. Tanenbaum, MODERN OPERATING SYSTEMS, Prentice Hall
- A. Silberschatz, P. Galvin and G. Gagne, APPLIED OPERATING SYSTEM CONCEPTS, Wiley 2003.
- Božo Krstajić, Operativni sistremi, autorizovana skripta, Podgorica 2006 (www.os.cg.ac.yu)

The forms of knowledge testing and grading:

- Tests, home exercises and laboratory exercises carry 10 points.
- I and II colloquium carry 20 points (40 points total).
- Final exam 50 points

Student gets the passing grade by collecting 50 points at least.

Special remarks for the course : If needed, the course can also be taught in English.

Teacher(s) who provided the information: *Ph.D. Božo KRSTAJIĆ*

Note: