Course syllabus
Programming Tools on Unix Computers
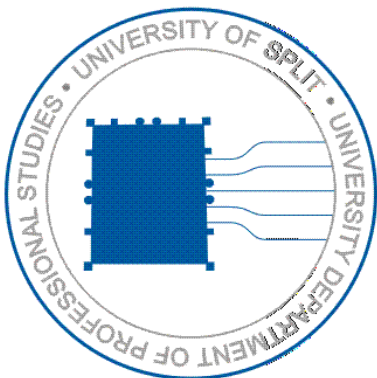
COURSE DETAILS

Type of study programme	Undergraduate professional study programme - 180 ECTS	
Study programme	INFORMATION TECHNOLOGIES	
Course title	Programming tools on Unix computers	
Course code	SIT137	
ECTS (Number of credits allocated)	6	
Course status	Optional	
Year of study	Third/fourth	
Course Web site	https://moodle.oss.unist.hr/course/view.php?id=524	
Total lesson hours per semester	Lectures	30
	Practicals	15
	Laboratory exercises & practical demonstration	30
Prerequisite(s)	None	
Lecturer(s)	Department of Information technologies: Nikola Grgić, lecturer	

COURSE DESCRIPTION	
Course Objectives:	• computer administration and software development in the Unix environment
Learning outcomes ***On successful completion of this course, student should be able to:***	1. use software tools in Unix environment (knowledge), 2. configure Unix-based computer, depending on the purpose of the computer (understanding) 3. administer Unix computer, and create software for Unix platform (application) 4. monitor the work of the Unix-based computer in a particular programming environment. Set its parameters based on the analysis (analysis) 5. propose the use of certain software tools as effective methods for solving problems (synthesis) 6. choose an engineering approach for problem solving, starting from the acquired knowledge of programming and knowledge of operating systems (evaluation)
Course content	Unix history. File system. File management. File archiving and compressing. Users and groups. File permissions and access control. Shell. Input and output redirection. Remote work on Unix system. Processes. Text editors. Regular expressions. Bash scripts. Gcc compiler. Make tool. Git version control system.

CONSTRUCTIVE ALIGNMENT – Learning outcomes, teaching and assessment methods

Alignment of students activities with learning outcomes		
Activity	**Student workload ECTS credits**	**Learning outcomes**
Lectures	30 hours / 1 ECTS	1,2,3,4,5
Laboratory work	30 hours / 1 ECTS	1,2,3,4,5
Seminar	15 hours / 0,5 ECTS	1
Self-study	66 hours / 2,2 ECTS	1,2,3,4,5
Self work on seminar and practicals	36 hours / 1,2 ECTS	1,2,5
Office hours and final exam	3 hours / 0,1 ECTS	1,2,3,4,5
TOTAL:	**180 hours / 6 ECTS**	**1,2,3,4,5**

CONTINUOUS ASSESSMENT		
Continuous testing indicators	**Performance A_i (%)**	**Grade ratio k_i (%)**
Class attendance	0 - 100	0
Laboratory attendance	70 - 100	0
Laboratory work	100	0
Seminar	10 - 100	50
Practical	10 – 100	50

FINAL ASSESSMENT		
Testing indicators – final exam (first and second exam term)	**Performance** A_i **(%)**	**Grade ratio** k_i **(%)**
Practical exam (computer or written)	40 - 100	80
Theoretical exam (oral)	100	0
Previous activities (include all continuous testing indicators)	10 - 100	20
Testing indicators – makeup exam (third and fourth exam term)	**Performance** A_i **(%)**	**Grade ratio** k_i **(%)**
Practical exam (computer or written)	40 – 100	80
Theoretical exam (oral)	100	0
Previous activities (include all continuous testing indicators)	10 - 100	20

PERFORMANCE AND GRADE		
Percentage	**Criteria**	**Grade**
50% - 61%	*basic criteria met*	sufficient (2)
62% - 74%	*average performance with some errors*	good (3)
75% - 87%	*above average performance with minor errors*	very good (4)
88% - 100%	*outstanding performance*	outstanding (5)

ADDITIONAL INFORMATION

Teaching materials for students (scripts, exercise collections, examples of solved exercises), teaching record, detailed course syllabus, application of e-learning, current information and all other data are available by MOODLE system to all students.