University of Split

Department of Professional Studies

PROGRAMMING IN JAVA

COURSE SYLLABUS

COURSE DETAILS		
Type of study programme	Professional study - 180 ECTS	
Study programme	INFORMATION TEHNOLOGY	
Course title	Programming in JAVA	
Course code	SIT034	
ECTS (Number of credits allocated)	5	
Course status	Optional	
Year of study	Third/fourth	
Semester	Fifth/seventh	
Course Web site	http://moodle.oss.unist.hr/	
Total lesson hours per semester	Lectures	30
	Practicals	0
	Laboratory exercises & practical demonstration	30
Prerequisite(s)	None	
Lecturer(s)	Josip Vrlić, BSc. of computer science., lecturer	
Language of instruction	Croatian	

COURSE DESCRIPTION	
Course Objectives:	• programming in the Java programming language, • knowledge of object-oriented paradigm in the Java programming language, • the use of Java in a variety of technologies and on different platforms.
Learning outcomes *On successful completion of this course, student should be able to:*	1. knowledge of the structure and model of the Java programming language, (knowledge) 2. use the Java programming language for various programming technologies (understanding) 3. develop software in the Java programming language, (application) 4. evaluate user requirements for software functionality required to decide whether the Java programming language can meet user requirements (analysis) 5. propose the use of certain technologies by implementing them in the Java programming language to solve the given problem (synthesis) 6. choose an engineering approach to solving problems, starting from the acquired knowledge of programming and knowledge of operating systems. (evaluation)
Course content	Object-oriented programming. Objects and classes. Operators. Flow control. Initialization and cleanup. Access Control. Reuse classes. Reuse classes. Polymorphism. Interfaces. The inner class. Exceptions. Java GUI. Strings. Fields. Java I / O. Containers. Parallel work in Java. Garbage collector.

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 / 1,6 ECTS**	**1,2,4,5,6**
Laboratory work	**30 hours / 1,6 ECTS**	**3,4**
Laboratory work - preparation	**26 hours / 1,4 ECTS**	**3,4,5**
Seminar	**16 hours / 0,9 ECTS**	**1,2,3,4,5,6**
Self-study	**30 hours / 1,6 ECTS**	**1,2,3,4,5,6**
Office hours and final exam	**18 hours / 0,9 ECTS**	**1,2,4,5,6**
TOTAL:	**150 hours / 5 ECTS**	**1,2,3,4,5,6**

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	**100**	**0**

FINAL ASSESSMENT		
Testing indicators – final exam (first and second exam term)	**Performance A_i (%)**	**Grade ratio k_i (%)**
Theoretical exam (written)	**50 - 100**	**0**
Practical exam (programming Java application)	**100**	**100**
Previous activities (include all continuous testing indicators)	**0 - 100**	**0**
Testing indicators – makeup exam (third and fourth exam term)	**Performance A_i (%)**	**Grade ratio k_i (%)**
Theoretical exam (written)	**50 - 100**	**0**
Practical exam (programming Java application)	**100**	**100**
Previous activities (include all continuous testing indicators)	**0 - 100**	**0**

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.