FACULTY W-8 / DEPARTMENT………………

SUBJECT CARD

Name in Polish Programowanie dostępu do Internetu w Javie …………….
Name in English Java and Internet Programming………………..………….
Main field of study (if applicable): Computer Science
Specialization (if applicable): ……………………..
Level and form of studies: 1st/ 2nd* level, full-time / part-time*
Kind of subject: obligatory / optional / university-wide*
Subject code INZ0273Wl
Group of courses YES / NO*

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU)	15		30		
Number of hours of total student workload (CNPS)	30		90		
Form of crediting	Examination / crediting with grade*		Examination / crediting with grade*	Examination / crediting with grade*	Examination / crediting with grade*
For group of courses mark (X) final course	X				
Number of ECTS points	1		3		
including number of ECTS points for practical (P) classes			2		
including number of ECTS points for direct teacher-student contact (BK) classes	0,6		1,8		

*delete as applicable

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES
1. Familiarity with Object Oriented programming paradigm.
2. C++ literacy
3. The ability to decompose real life problems.
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SUBJECT OBJECTIVES
C1 Mastering the object oriented programming paradigm.
C2 Presentation of the Java programming language.
C3 Making familiar with basic internet java programming.
C4 Learning to communicate the results of the work.

SUBJECT EDUCATIONAL EFFECTS
relating to knowledge:
PEK_W01 Understanding the OO programming paradigm.
PEK_W02 Learning the Java programming language.
PEK_W03 Is familiar with principles GUI programming.
PEK_W04 Is familiar with principles of Internet programming.

relating to skills:
PEK_U01 Mastering the problem analysis and its implementation using the OO programming

paradigm.

PEK_U02 Mastering the usage of development tools.

PEK_U03 Practices the recommended principles of problem implementation and program
development.

relating to social competences:

PEK_K01 Knows how to concisely and exhaustively communicate the results of her/his word
in English.

PROGRAMME CONTENT		
Form of classes - lecture		Number of hours
Lec 1	Language fundamentals, comparison with CPP, assertions, JUnits.	2
Lec 2	Object orientation: encapsulation, inheritance, polymorphism, overriding.	2
Lec 3	UI and graphics programming.	2
Lec 4	Collections: Vectors, Sets, Trees, Maps, Generic collections	2
Lec 5	Exceptions, error handling, Thread control, object	2
Lec 6	Introduction to Networking with Java, HTML parsing, Applet programming	2
Lec 7	I/O and Streams, Object Streams and RMI, client and server sockets, Object serialization	2
Lec 8	Final Test	1
	Total hours	15

Form of classes - class		Number of hours
Cl 1		
Cl 2		
Cl 3		
Cl 4		
..		
	Total hours	

Form of classes - laboratory		Number of hours
Lab 1	Introductionary class.	2
Lab 2	Using existing applets.	2

Lab 3	Familiarizing with the Java IDE.	2
Lab 4	First classes.	2
Lab 5	Class Inheritance and aggregation.	2
Lab 6	Polymorphism, overriding.	2
Lab 7	Basic GUI programming.	2
Lab 8	Advanced GUI programming.	2
Lab 9	Collections Array, Vector, Sets.	2
Lab 10	Collections: Trees, Maps.	2
Lab 11	Data reformatting and error handling.	2
Lab 12	Multithread programming.	2
Lab 13	Data extraction from Web pages.	2
Lab 14	Applet development.	2
Lab 15	Practical test.	2
	Total hours	30

Form of classes - project		Number of hours
Proj 1		
Proj 2		
Proj 3		
Proj 4		
…		
	Total hours	

Form of classes - seminar		Number of hours
Sem 1		
Sem 2		
Sem 3		
…		
	Total hours	

TEACHING TOOLS USED
N1. Lectures with multimedia presentations. N2. Presentation of software presentation tools. N3. E-learning system for publication of primary and supplementary course materials. N4. Laboratory work

EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT

Evaluation (F – forming (during semester), P – concluding	Educational effect number	Way of evaluating educational effect achievement

(at semester end)		
F1	PEK_W01 PEK_W02 PEK_W03 PEK_W04	Final test checking students' theoretical knowledge and ability to analyze source code. To pass a student has to get at least 50% of all points.
F2	PEK_W02 PEK_W03 PEK_U01 PEK_U02 PEK_U03 PEK_K01	Solving tasks given by the teacher. The student has to explain the way he/she has solved any task and be able to introduce small changes to the solution in an on-line manner. Solving at least 80% of all task is obligatory.
F3	PEK_U01 PEK_U02 PEK_U03	Final test. Developing code of 3 tasks provided by the teacher. Solving 2 of them is necessary to pass.
P1	All effects	The final grade is composed from the following ingredients: 60% F1 25% F2 15% F3 The grades are assigned according to the following principle: <40% 2,0 <=40, 50> 3,0 <=50, 60> 3,5 <=60, 70> 4,0 <=70, 80> 4,5 <=80, 90> 5,0 <=90, 100>= 5,5
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PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

[1] Eckel B.: Thinking in Java, available at www.bruceeckel.com
[2] Burd B.: Java For Dummies, Wiley Publishing Inc.
[3] Cadenhead R.:Sams Teach Yourself Java in 21 Days (Covering Java 7 and Android)   Prentice Hall Publishing\

SECONDARY LITERATURE:

[1] Schildt H.: Java The Complete Reference, The McGraw Inc.
[2] Flanagan D.: Java Examples in a Nutshell, O'Reilly
[3] Darwin I.F.:Java Cookbook, O'Reilly

SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)

Ph.D. Andrzej Siemiński

MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
Java Internet Programming
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY
Computer Science
AND SPECIALIZATION ……………………………..

Subject educational effect	Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)**	Subject objectives***	Programme content***	Teaching tool number***
PEK_W01 (knowledge)	K1INF_05	C1	Lec1, Lec2	N1, N3
PEK_W02	K1INF_06	C2	Lec2, Lec3, Lec5, Lec7	N1, N3
PE_W03	K1INF_05	C3	Lec6	N1, N3
PE_W04	K1INF_14	C4	Lec5- Lec 7	N1, N3
PEK_U01 (skills)	K1INF_U03	C1	Lab1, Lab9, Lab 10	N2, N4
PEK_U02	K1INF_U15	C2	Lab 3, Lab4,	N2, N4
PEK_U03	K1INF_U04	C2	Lab 5, Lab6, Lab 7, Lab8, Lab11, Lab 13, Lab 14	N2, N4
PEK_K01 (competences)	K1INF_K06	C4	Lab2-Lab13	N2, N4

** - enter symbols for main-field-of-study/specialization educational effects

*** - from table above