FACULTY W-8 / DEPARTMENT………………

SUBJECT CARD

Name in Polish *Architektura klient-serwer*
Name in English *Client-Server Architecture*
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 INZ0267Wl
Group of courses YES / NO*

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU)	30			30	
Number of hours of total student workload (CNPS)	60			90	
Form of crediting	Examination / crediting with grade*	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	2			3	
including number of ECTS points for practical (P) classes	0			2	
including number of ECTS points for direct teacher-student contact (BK) classes	1,2			1,8	

*delete as applicable

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES
1. Is able to develop software application in chosen programming language
2.
3.
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SUBJECT OBJECTIVES
C1 To enhance students' knowledge about modern client-server architectures
C2 To learn how to practically use client-server architecture in building software systems

SUBJECT EDUCATIONAL EFFECTS
relating to knowledge:
PEK_W01 Has a basic knowledge about modern client-server architectures
PEK_W02 Has a basic knowledge necessary to utilize client-server architecture in software
        development
…
relating to skills:
PEK_U01Is able to discus and evaluate the advantages of using client-server
PEK_U02 Is able to utilize client-server architecture in software development

…
relating to social competences:
PEK_K01Is able to work in and manager a small software development team

PROGRAMME CONTENT		
Form of classes - lecture		**Number of hours**
Lec 1	Introduction to Client-Server Architecture	2
Lec 2	The Client Server Model And Software Design	2
Lec 3	Client/Server Building Blocks	2
Lec 4	Clients, Servers and Operating Systems	2
Lec 5	Algorithms & Issues in Client Software Design	2
Lec 6	Base Middleware	2
Lec 7	RPC, Messaging and Peer-to-Peer	2
Lec 8	Database Servers	2
Lec 9	Transaction Processing	2
Lec 10	Client/Server with distributed Objects	2
Lec 11	Client/Server and the Internet	2
Lec 12	Service Oriented Architecture SOA	2
Lec 13	Intro to Web Services	2
Lec 14	Describing Web Services: WSDL	2
Lec 15	Test	2
	Total hours	30
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		
Lab 2		
Lab 3		
Lab 4		
Lab 5		
…		

	Total hours	

Form of classes - project		**Number of hours**
Proj 1	Introduction, Project teams building	2
Proj 2	Brainstorming	2
Proj 3	Presentation of self prepared or chosen idea of client/server solution.	2
Proj 4	Building final, revised concept of projected solution.	2
Proj 5	Setup of project's infrastructure	2
Proj 6	Sprint 1 Iteration 1	2
Proj 7	Sprint 1 Iteration 2	2
Proj 8	Sprint 1 Iteration 3 and sprint demo	2
Proj 9	Sprint 2 Iteration 1	2
Proj 10	Sprint 2 Iteration 2	2
Proj 11	Sprint 2 Iteration 3 and sprint demo	2
Proj 12	Sprint 3 Iteration 1	2
Proj 13	Sprint 3 Iteration 2	2
Proj 14	Sprint 3 Iteration 3 and sprint demo	2
Proj 15	Final assessment	2
	Total hours	30

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

TEACHING TOOLS USED
N1. Lecture N2. The course web page with references to literature N3. Software development tools

EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT

Evaluation (F – forming (during semester), P – concluding (at semester end)	Educational effect number	Way of evaluating educational effect achievement
F1	PEK_U01-02, PEK_K01	Evaluation of the concept of solution [20 points] (Lab1-4)
F2	PEK_U01-02,	Evaluation of the sprint demo 1[20 points] (Lab5-8)

	PEK_K01	
F3	PEK_U01-02, PEK_K01	Evaluation of the sprint demo 2[20 points] (Lab9-11)
F4	PEK_U01-02, PEK_K01	Evaluation of the sprint demo 3[40 points] (Lab12-14)
C1	PEK_U01-02, PEK_K01	C1 is based on the sum of the points from F1…F4. At least 50% of points is required.
C2	PEK_W01-02	C2 is based on the result of a written test covering material presented during lectures. At least 50% of points is required to pass the test.
C		

PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

[1] Client/Server Survival Guide, 3rd Edition by Robert Orfali, Dan Harkey and Jeri Edwards, John Wiley, 1999
[2] Internetworking with TCP/IP Vol III, Client/Server Programming & Applications (Linux/POSIX Sockets Version), Douglas E. Comer and David L. Stevens Prentice Hall 2001
[3]

SECONDARY LITERATURE:

[1] Schank J.D.: Novell's Guide to Client-Server Application and Architecture, Novell Press, Sybex, 1994.
[2] Hall C.L.: Technical Foundations of Client/Server Systems, John Wiley & Sons. Inc., 1994.
[3]

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

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MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
Client-Server Architecture
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY
…………………………..
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_W10 K1INF_W11	C1	Lec1-Lec14	N1 – N2
PEK_W02	K1INF_W11 K1INF_W10	C1-C2	Lec1-Lec14	N1 – N2
PEK_U01 (skills)	K1INF_U10	C1-C2	Lec1-Lec14 Proj1-Proj15	N1 – N3
PEK_U02	K1INF_U06	C2	Proj1-Proj15	N3
PEK_K01 (competences)	K1INF_K03	C2	Proj1-Proj15	N1 – N3

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

*** - from table above