FACULTY OF COMPUTER SCIENCE AND MANAGEMENT

SUBJECT CARD

Name in Polish Internetowe serwisy i systemy informacyjne
Name in English Internet Information Services and Systems
Main field of study (if applicable): Management
Specialization (if applicable):   Business Information System (BIS)
Level and form of studies: 2nd level, full-time
Kind of subject: obligatory
Subject code IEZ1202
Group of courses 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)	60		60		
Form of crediting	crediting with grade		crediting with grade		
For group of courses mark (X) final course					
Number of ECTS points	2		2		
including number of ECTS points for practical (P) classes			2		
including number of ECTS points for direct teacher-student contact (BK) classes	0.5		1.0		

*delete as applicable

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES
Basic knowledge of and skills in the information technology, programming and networking.
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SUBJECT OBJECTIVES
C1 To acquire knowledge of the computer networks and protocols – operation, diagnostics, applications and security.
C2 To acquire knowledge of the properties and features of the hosting providers and their services.
C3 To acquire knowledge of the Internet application servers, their programming languages and database types.
C4 To acquire knowledge of the various Internet information systems, their features and applications in management.
C5 To identify the commercial and free Internet information systems on the market.
C6 To acquire skills in installing and configuring server-side information systems and databases.

SUBJECT EDUCATIONAL EFFECTS
relating to knowledge:
PEK_W01 Understands how computer networks and protocols operate and how to diagnose them.
PEK_W02 Is aware of and has elementary knowledge of the threats and preventive measures
        for securing the network communications.
PEK_W03 Knows main properties and features of the hosting service providers.
PEK_W04 Has elementary knowledge of the Internet application servers, their programming
        frameworks and databases.

PEK_W05 Knows the types of the Internet information systems and their applications in organizations.

relating to skills:
PEK_U01 Can use appropriate network diagnostic tools.
PEK_U02 Is able to send and receive digitally signed and encrypted messages.
PEK_U03 Can compare features of application hosting service platforms and match them to the needs of an organization.
PEK_U04 Can match an Internet information system to the needs of an organization.
PEK_U05 Can sign up for and configure an application hosting service account.
PEK_U06 Can transfer to the server, install and configure server-side information system applications.

PROGRAMME CONTENT	
Form of classes - lecture	**Number of hours**
Lec 1 Introduction	1
Lec 2 Computer networks, protocols, diagnostics and security	2
Lec 3 Internet information systems: idea, architecture and types	1
Lec 4 Hosting services and application servers	1
Lec 5 The market of client-server software: an overview of free and commercial solutions and areas of their application	1
Lec 6 Description, features, applications and overview of the CMS systems	1
Lec 7 Description, features, applications and overview of the ECMS and eCommerce/Shopping Cart systems	1
Lec 8 Description, features, applications and overview of the LMS and CRM systems	1
Lec 9 Other types of web applications. Voice and audio-video systems	1
Lec 10 A web browser as the application execution platform	1
Lec 11 The client-side programming – an overview	1
Lec 12 The server-side programming and databases – an overview	1
Lec 13 Grading, remarks and conclusions	2
Total hours	15
Form of classes - laboratory	**Number of hours**
Lab 1 Introduction to the subject, the computer lab environment and safety rules	2
Lab 2 Assignment 1: networking services and protocols, diagnostics and security	4
Lab 3 Assignment 1: presentation and assessment of results	2
Lab 4 Assignment 2: identification of the hosting services on the market, creating accounts, testing the features of the accounts, script interpreters and databases	4
Lab 5 Assignment 2: presentation and assessment of results	2
Lab 6 Assignment 3: identification of the available solutions, installing and testing a system of type 1 (mandatory type: CMS)	4

Lab 7	Assignment 3: presentation and assessment of results	2
Lab 8	Assignment 4: identification of the available solutions, installing and testing a system of type 2 (individual choice)	2
Lab 9	Assignment 4: presentation and assessment of results	2
Lab 10	Assignment 5: identification of the available solutions, installing and testing a system of type 3 (individual choice)	2
Lab 11	Assignment 5: presentation and assessment of results	2
Lab 12	Summing-up and remarks about problems and solutions	2
	Total hours	**30**

TEACHING TOOLS USED

N1. Traditional lecture with overhead slides
N2. Short movies demonstrating some features of the information systems being addressed
N3. Assignments to carry out individually or in teams, in the computer lab and at home
N4. Discussion of the achievements (causes of failures if applicable) during each presentation of students' results

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_W01-PEK_W05	Answers to questions (written or at a computer)
F2	PEK_U01-PEK_U06	Assessment of achievements and understanding of the assignment issues (during presentation and discussion)
F3	PEK_U01-PEK_U06	Assessment of the reports of the assignments
F4	PEK_W01-PEK_W05	Lecture attendance (bonus credits)
P=F1+F2+F3+F4		

PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

[1]   Course resources published at the course website.
[2]   Stallings W., Case T., Business Data Communications – Infrastructure, Networking and Security, Prentice Hall, 2012.
[3]   Nixon R., Learning PHP, MySQL, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites, O'Reilly Media, 2012.
[4]   Szemplinski P.E., ECM Buyer Beware: Real Insights & Answers for Decision Makers, lulu.com, 2011.

SECONDARY LITERATURE:

[1]   Websites of software vendors and others on the subject.
[2]   Kurose J.F., Ross K.W., Computer Networking, Prentice Hall, 2012.
[3]   Ullman L., PHP and MySQL for Dynamic Web Sites, Peachpit Press, 2011.
[4]   Rockoff L., The Language of SQL: How to Access Data in Relational Databases, Course Technology PTR, 2010.
[5]   Canavan T., CMS Security Handbook: The Comprehensive Guide for WordPress, Joomla, Drupal, and Plone, Wiley, 2011.

[6]   Cameron S.A., Enterprise Content Management - A Business and Technical Guide, British Informatics Society Ltd, 2011.

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

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MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
Internet Information Services and Systems
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY **Management**
AND SPECIALIZATION **Business Information System (BIS**)

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	S2_BIS_W03	C1	Wy2	N1
PEK_W02	S2_BIS_W03	C1	Wy2	N1
PEK_W03	S2_BIS_W03	C2	Wy4	N1, N2
PEK_W04	S2_BIS_W03	C3	Wy10–Wy12	N1
PEK_W05	S2_BIS_W03	C4, C5	Wy3, Wy5–Wy9	N1, N2
PEK_U01	S2_BIS_U05	C1	Lab2, Lab3	N3, N4
PEK_U02	S2_BIS_U05	C1	Lab2, Lab3	N3, N4
PEK_U03	S2_BIS_U05	C2, C3	Lab4, Lab5	N3, N4
PEK_U04	S2_BIS_U05	C4	Lab6–Lab11	N3, N4
PEK_U05	S2_BIS_U05	C6	Lab4, Lab5	N3, N4
PEK_U06	S2_BIS_U05	C6	Lab6–Lab11	N3, N4

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