DESCRIPTION OF THE COURSE OF STUDY

Course code		**0613-2INF-F48-AI**
Name of the course in	Polish	**Aplikacje internetowe**
	English	**Internet Applications**

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	Computer Science
1.2. Mode of study	Full-time
1.3. Level of study	Undergraduate engineering study
1.4. Profile of study	General academic
1.5. Person/s preparing the course description	dr hab. Dariusz Banaś prof. UJK
1.6. Contact	d.banas@ujk.edu.pl

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Language of instruction	English
2.2. Prerequisites	Programming fundamentals, Computer Networks, Databases

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes		lectures, laboratories, project
3.2. Place of classes		Courses in the UJK teaching rooms of the Faculty of Exact and Natural Science
3.3. Form of assessment		credit with grade (lectures, laboratories, project)
3.4. Teaching methods		lectures– informative lectures laboratories, project – laboratory method
3.5. Bibliography	**Required reading**	1. A. Sharma, A. Gupta, V. Sharma Fundamentals of Internet Applications, 2nd Edition, ISBN 81-89510-25-8 2. E. Andersson, P. Greenspun Software Engineering for Internet Applications, Cambrige MIT Press
	Further reading	1. A. Navarro, XHTML, 2. V. DeBolt, HTML i CSS, 3. www.w3schools.com

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES

4.1. Course objectives (including form of classes)
Knowledge (lectures and laboratories) C1. Familiarization with the basic technologies enabling the presentation of information on the WWW. C2. Learning about advanced technologies for building websites and programming web applications. **Abilities (laboratories and project)** C1. Acquiring the ability to practically apply the acquired technologies to build websites and Internet applications.

4.2. Detailed syllabus (including form of classes)

Lectures and laboratories:

1. Basic components of WWW architecture: HTTP protocol, browsers, HTTP server.
2. Programming languages enabling the design, development and creation of standard websites: HTML language, cascading style sheets (CSS) and their interactive and dynamic versions: PHP, ASP, JavaScript, Ajax.
3. Static and dynamic page structure, positioning of elements on the page, transfer of parameters between the parties.
4. Cooperation with databases. Forms and checking the correctness of entered data.
5. XML language and its implementations.
6. Basics of technology: Flash, SVG and SMIL.
7. Content management systems (CMS).
8. Basics of ASP.NET technology.
9. Creating simple web applications using ASP.NET technology, C# language and engine RAZOR renderer.

4.3. Education outcomes in the discipline

Code	A student, who passed the course	Relation to learning outcomes
within the scope of **KNOWLEDGE:**		
W01	explains the basic principles of operation of the WWW information system	INF1A_W10-11 INF1A_W14-15 INF1A_W22
W02	explains the basic technologies used to create static websites websites and understands their limitations	INF1A_W11 INF1A_W14-15
W03	explains advanced technologies used to create dynamic websites	INF1A_W06-07 INF1A_W11
W04	knows the scripting programming language and describes its limitations and explains the difference in way of interpreting various scripting languages	INF1A_W06-07 INF1A_W11
W05	knows the basic methods and selected language for creating Internet applications	INF1A_W06-07 INF1A_W11
W06	lists methods of communication between a web application and a database	INF1A_W06-07 INF1A_W12 INF1A_W16
within the scope of **ABILITIES:**		
U01	can create an advanced static website and place it on a server	INF1A_U10-12 INF1A_U16
U02	can choose technologies and use them to create a dynamic website	INF1A_U09-12 INF1A_U16 INF1A_U22
U03	can design and prepare a simple web application using technologies learned	INF1A_U08-12 INF1A_U16
U04	can create a website and/or a Internet application that uses data collected in the database	INF1A_U10-12 INF1A_U15-16
U05	is able to prepare documentation of the completed design task	INF1A_U10-12 INF1A_U16
U06	understands the need for continuous education	INF1A_U24
within the scope of **SOCIAL COMPETENCE:**		
K01	identifies the opportunities offered by the opportunity to present yourself and your achievements	INF1A_K04
K02	understands the need to protect intellectual property	INF1A_K03
K03	is able to plan and time assigned project tasks	INF1A_K02

4.4. Methods of assessment of the intended learning outcomes

Teaching outcomes *(code)*	Method of assessment (+/-)																				
	Oral answer			**Project**			**Self-study**			**Group work**											
	Form of classes			***Form of classes***			***Form of classes***			***Form of classes***			***Form of classes***			***Form of classes***			***Form of classes***		
	L	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*
W01	+																				
W02	+																				
W03	+																				
W04	+																				
W05	+																				
W06	+																				
U01						+		+				+									
U02						+		+				+									
U03						+		+				+									
U04						+		+				+									
U05						+		+				+									
U06						+		+				+									
K01	+																				
K02	+																				
K03	+																				

4.5. Criteria of assessment of the intended learning outcomes		
Form of classes	**Grade**	**Criterion of assessment**
lecture (L)	**3**	at least 50% and not more than 60% of the total number of available points
	3,5	more than 60% and not more than 70% of the total number of available points
	4	more than 70% and not more than 80% of the total number of available points
	4,5	more than 80% and not more than 90% of the total number of available points
	5	more than 90% of the total number of available points
classes (C)	**3**	at least 50% and not more than 60% of the total number of available points
	3,5	more than 60% and not more than 70% of the total number of available points
	4	more than 70% and not more than 80% of the total number of available points
	4,5	more than 80% and not more than 90% of the total number of available points
	5	more than 90% of the total number of available points
project (P)	**3**	at least 50% and not more than 60% of the total number of available points
	3,5	more than 60% and not more than 70% of the total number of available points
	4	more than 70% and not more than 80% of the total number of available points
	4,5	more than 80% and not more than 90% of the total number of available points
	5	more than 90% of the total number of available points

5. BALANCE OF ECTS CREDITS – STUDENT'S WORK INPUT

Category	**Student's workload**	
	Full-time studies	**Extramural studies**
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/		
Participation in lectures	30	
Participation in laboratories/project	45	
Preparation for the exam		
Others		
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/		
Preparation for the lecture		
Preparation for the laboratories	30	
Preparation for the exam		
Gathering materials for the project	20	
Preparation of multimedia presentation		
*Others**		
TOTAL NUMBER OF HOURS	***125***	
ECTS credits for the course of study	**5**	

Accepted for execution *(date and signatures of the teachers running the course in the given academic year)*

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