COURSE DESCRIPTION CARD - SYLLABUS

Course name

Internet Technologies and Services

Course

Field of study

Engineering Management

Area of study (specialization)

The Enterprise Management of the Future

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

Polish

Requirements

elective

Number of hours

Lecture

15

Laboratory classes

Other (e.g. online)

Tutorials

15

Projects/seminars

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

Ph.D., Eng. Krzysztof Hankiewicz,

Mail to: krzysztof.hankiewicz@put.poznan.pl

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:

Ph.D., Eng. Zbigniew Włodarczak,

Mail to:zbigniew.wlodarczak@put.poznan.pl

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

Prerequisites

Knowledge and skills in computer science subjects of 1st degree studies. Awareness of the need to constantly update and expand their knowledge and skills.

Course objective

Students should understand the way the Internet works and the modern concept of network services to

the extent that it enables informed selection and use of available technologies. Deepening knowledge of issues of technology and internet services.

Course-related learning outcomes

Knowledge

The student describes how Internet technologies, including multi-tiered applications and web services, affect business operations [P7S_WG_06].

The student explains methods of data acquisition and analysis on the Internet, including the use of XML and XSLT in electronic document exchange [P7S_WG_07].

The student defines ethical standards related to the use of Internet technologies, including aspects of privacy and data security [P7S_WK_01].

The student characterizes the principles of intellectual property and copyright protection in the context of web content and application development [P7S_WK_02].

Skills

The student analyzes and evaluates the effectiveness of Internet technologies, including static and dynamic Web pages and multilayer applications [P7S_UW_03].

The student analyzes the social and cultural aspects of the use of Internet technologies, including the impact of cryptography on network security [P7S_UW_05].

The student interprets and explains the relationship between Internet technologies and various social, cultural and economic aspects [P7S_UW_06].

The student applies legal principles and standards in the design of web applications, including data validation and report generation [P7S_UW_08].

Social competences

The student perceives and manages cause-and-effect relationships in the implementation and use of Internet technologies in various business scenarios [P7S_KK_02].

The student is prepared to initiate and conduct projects related to Internet technologies, with a particular focus on the development and implementation of innovative Internet services [P7S_KO_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The lecture grade is based on two colloquium. Questions and tasks checking understanding of the issues. Passing threshold - 50%.

Exercise grade is the average of individual tasks performed during classes. The assessment takes into account the correctness and completeness of the results obtained. Passing threshold - 50%.

Programme content

Lecture: Static and dynamic web site technologies with various scripting languages. Multilayer applications. The role of XML and XSLT in electronic document exchange. The concept of network service and associated protocols. Cryptographic foundations of network security.

Exercise: Design of a simple application based on examples of forms in HTML and scripts cooperating with them on the browser and server side. PHP scripts saving data to oak databases, data validation rules and creating simple reports.

Teaching methods

Lectures: informative lecture, problem lecture, seminar lecture, case method.
Classes: laboratory (experiment) method, workshop method, project method.

Bibliography

Basic

1. Włodarczak Z., Technologie i usługi internetowe; PHP, Wydawnictwo Politechniki Poznańskiej, Poznań 2013

2. Borucki A., Włodarczak Z., Techniki opracowywania stron WWW, Wydawnictwo Politechniki Poznańskiej, Poznań 2013

3. Hankiewicz K, Lasota A.M., Cechy determinujące jakość użytkową serwisu internetowego przeznaczonego dla klientów transportu publicznegoLogistyka - 2015, nr 3, p. 5670-5673.

Additional

1. Bendoraitis A., Aplikacje internetowe z Django. Najlepsze receptury, Helion, 2015

2. Duckett J., JavaScript i jQuery. Interaktywne strony WWW dla każdego, Helion, Gliwice 2015

3. Duckett J., HTML i CSS. Zaprojektuj i zbuduj witrynę WWW. Podręcznik Front End Developera, Helion, Gliwice 2014

4. Hankiewicz K., Prussak W., Jakość użytkowa internetowego serwisu biznesowego - studium przypadku, Zeszyty Naukowe. Ekonomiczne Problemy Usług / Uniwersytet Szczeciński. - 2011, nr 68 (651), s. 39-47

5. Lis M., PHP7. Praktyczny kurs, Helion, Gliwice 2017

6. Mitchell L. J., API nowoczesnej strony WWW. Usługi sieciowe w PHP, Helion, 2015

Breakdown of average student's workload

	Hours	ECTS
Total workload	55	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for tutorials, preparation for tests) [1]	25	1,0

1 delete or add other activities as appropriate