SYLLABUS FOR 2023/2024 ENROLMENT
FORM OF STUDY: FULL-TIME PROGRAMME

GENERAL INFORMATION

1. **Course** Internet technology

2. **Field of study** Computer Science

3. **Level of acquired education** First-cycle programme

4. **Number of ECTS credit 5**

5. **Number of hours per semester**

semester	lecture	classes	laboratory/foreign language course	project/practical classes	self-study	internship
I	15		30			

6. **Language of instruction: English**

7. **Lecturer dr inż. Jakub Smołka, mgr inż. Sebastian Sawczuk**

DETAILED INFORMATION

8. Preliminary requirements

1. Operating system skills

2. Knowledge of computer networks

9. Course objectives

C1 The objective of the course is to develop the habit of keeping up-to-date with the development of the Internet and Internet technologies, current events in this field and online threats.

C2 The objective of the course is to familiarise students with basic notions and to systematise knowledge of the Internet and Internet technologies, as well as rules governing the Internet.

C3 The objective of the course is to familiarise students with the technology (hardware and software) of internet technologies.

10. Field-specific learning outcomes in terms of knowledge, skills and social ompetences

A student who completed the course:	reference to field-specific learning outcomes
KNOWLEDGE	
EU01 Knows and understands the concepts of internet technologies.	K_W06 K_W09 K_W16
EU02 Knows and understands the concepts of safe use of the Internet	K_W06 K_W09 K_W16
EU03 Knows and understands the concepts in self-directed searching for information on the internet and its verification	K_W06 K_W09 K_W16
SKILLS	
EU04 Is able to apply the principles of Netiquette	K_U18 K_U22
EU05 Is able to distinguish network services	K_U14 K_U21
EU06 Is able to configure and secure a connection to the Internet	K_U14 K_U21
EU07 Is able to install and configure browsers and other internet related software such as e-mail programmes, cloud computing services	K_U14 K_U21
SOCIAL COMPETENCES	
EU08 Understands the threats of the Internet	K_K04

11. Course content

Course delivery method – lectures/ classes/laboratories/practical classes

Lectures:
1) Basic information about the Internet. History of the Internet. Threats.
2) TCP/IP vs. ISO/OSI Model: IP:TCP,UDP,ICMP. DNS. Connecting to networks. Network services. Internet vs Intranet and Extranet. Network addresses; Universal Naming Convention, Uniform Resource Locator, Uniform Resource Identifier.

3) Internet services and protocols: http, https, email, ftp, sftp, rss, smtp, pop3, imap. HTTP protocol.
4) Web browsers. Installing and configuring browsers. Cooperation of a browser with a server, configuration, cloud computing services.
5) MAC addresses, IP addressing and domain structure (DNS servers, DNS registry). Searching for information on the Internet.
6) Netiquette and general rules of communication in the network.
7) Internet communication technologies in the hardware layer, routing tables, firewall configuration
8) Web page positioning.

Laboratories:
1) Organisational activities. Basic information about the Internet. Connecting to the network. Network services. Internet versus Intranet and Extranet.
2) Hardware configuration of Internet access, setting up communication cables scheme A and B, cross.
3) Analysis and configuration of WiFi, NFC, Bluetooth communication. Acces Point, Router, Repeater - basic settings (DHCP server and others)
4) Internet services and protocols: http, https, email, ftp, sftp, rss, smtp, pop3, imap. HTTP protocol. Web browsers. Installing and configuring browsers.
5) Configuration of cloud computing services using outlook.com as an example
6) Cooperation of a browser with a server, configuring. Browsers and searching information.
7) MAC addresses, IP addressing and domain structure (DNS servers, DNS registry). Internet domain registration. DYN DNS
8) VPN networks, remote computer administration, FTP services
9) Server installation and configuration
10) Security mechanisms (Firewall configuration)
11) Web page positioning.

12. Teaching tools and methods
1. Lecture in the form of a multimedia presentation
2. Training films
3 Practical method based on observation and analysis
4. Explanation and multimedia presentation
5. Discussion
6. Office hours

13. Assessment method (component, final)
1. Report
2 Test
3 Graded pass
4 Examination

14. Student workload	
Form of activity	Number of hours
1. Classes with direct participation of the teacher and office hours	55
2.Student workload	45
Sum	100
Number of ECTS credits	5

15. Reference books
Primary:
1) Maria Sokół, Piotr Rajca, Internet. Ćwiczenia praktyczne. Wydanie IV, Helion Gliwice, 2010

2)	B. Pfaffenberger, HTML 4: biblia, Wyd. Helion Gliwice, 2001
3)	E.Castro, Po prostu HTML 4, Wyd. Helion Gliwice, 2003
4)	M. Nowakowski, PHP & MySQL dla webmastera, Wyd. Translator, Warszawa 2001
5)	Wybrane fragmenty dokumentacji dostepnej online: http://pl.php.net
6)	M. MacDonald, Tworzenie stron www: nieoficjalny podrecznik: HTML, CSS, Blogi, Wyd. Helion, Gliwice 2006

Secondary:

1)	Maria Sokół, Internet. Przewodnik, Wyd. Helion Gliwice, 2004
2)	D. Cederholm, Kuloodporne strony internetowe. Jak pozyskać elastyczność z wykorzystaniem XHTML-a i CSS, Helion 2006
3)	B. Danowski, HTML5. Cwiczenia praktyczne, Helion 2012

16. Assessment form - details

Conditions for obtaining course credit*:* the course ends with an exam.

The method of learning outcomes verification:

The assessment of the degree of learning outcomes achieved by the student takes place according to the following criteria:

5.0 - learning effect was achieved without reservations

4.5 - learning effect was achieved with single insufficiencies / errors

4.0 - learning effect was achieved with few insufficiencies /errors

3.5 - learning effect was achieved with many insufficiencies /errors

3.0 - learning effect was achieved with numerous and significant insufficiencies /errors (minimum required level of achievement of the effect)

2.0 - learning effect not achieved

17. Other details concerning thecourse

1. Direct information about the issues of classes and a program content is provided by the teacher during classes and during office hours.

2. Classes will be held at AB in Biała Podlaska

3. Classes will be held in accordance with the current schedule

4. Office hours will be held in accordance with the applicable schedule