#### Card OF COURSE

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| Subject name | Universal Design and Accessibility in Cyberspace |

1. The placement of the subject in the study system

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| 1.1. Field of study | Computer science |
| 1.2. Form and path of study | Full-time/Part-time |
| 1.3. Level of education | First-cycle studies |
| 1.4. Study profile | Practical |

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| 1. 5. Specialty | - |
| 1.6. Subject Coordinator | Mgr Rafał Sadownik |

2. General characteristics of the subject

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| 2.1. Belonging to a subject group | Directional/Practical |
| 2.2. Number of ECTS | 1 |
| 2.3. Language of lectures | English |
| 2.4. Semesters in which the subject is taught | IV |
| 2.5.Criteria for selecting course participants | - |

1. Learning outcomes and course delivery
   1. Subject Objectives

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| No. | Subject Objectives |
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| C1 | The course is intended to acquaint students with the philosophy of designing cyber-related products and services in such a way that they can be used by all people, to the greatest extent possible, without the need for adaptation or special design. |
| C2 | Learning about the types of needs resulting from, among others, disabilities (vision, hearing, musculoskeletal, intellectual and autism spectrum) or age. |
| C3 | Knowledge to provide a variety of media for people with special needs, including WCAG and WCAG 2.1 |

* 1. Subject-specific learning outcomes, divided into knowledge , skills and competences , with reference to the directional learning outcomes

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| No. | Description of subject  learning outcomes | Reference to  directional effects  learning (symbols) | Method of implementation (mark "X") | | | |
| ST | | NST | |
| Classes at the University | Activities on  the platform | Classes at the University | Activities on  the platform |
| After passing the course, the student knows and understands **the knowledge** | | | | | | |
| W1 | The student understands the importance of universal design in the context of the accessibility of products and services for people with various functional limitations. | INF\_W20  INF\_W21  INF\_W22 | X |  | X |  |
| W2 | The student knows the principles and standards regarding the adaptation of digital content to the needs of people with special needs, taking into account modern technological guidelines. | X |  | X |  |
| After passing the course, the student is **able** to: | | | | | | |
| U1 | The student is able to analyze the needs of various user groups and take them into account at the stage of designing products and services. | INF\_U12  INF\_U21  INF\_U22 | X |  | X |  |
| U2 | The student is able to use tools and methods supporting the accessibility of content and interfaces, including developing various forms of transmitting information. | X |  | X |  |
| U3 | The student is able to evaluate existing digital solutions in terms of compliance with accessibility principles and propose their improvement. | X |  | X |  |
| After completing the course, the student is ready to take part in **social competences.** | | | | | | |
| K1 | The student is aware of the social responsibility associated with designing accessible products and services and recognizes the importance of inclusivity in cyberspace. | INF\_K03 | X |  | X |  |
| K2 | The student demonstrates openness and empathy towards the diverse needs of users and is able to collaborate effectively in project teams to create accessible solutions. | X |  | X |  |

3.3. Forms of teaching and their number of hours - Full-time studies (ST), Part-time studies (NST)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Path | Lecture | Exercises | Design | Workshop | Laboratory | Seminar | Lecturer | Classes conducted using distance learning methods and techniques in the form of ………………. | Other | **ECTS points** |
| **ST** |  |  |  | 15 |  |  |  |  |  | 1 |
| **NST** |  |  |  | 15 |  |  |  |  |  | 1 |

3.4. Content of education (separately for each form of classes: (W, ĆW, PROJ, WAR, LAB, LEK, OTHER). It should be marked (X) how the given content will be implemented (classes at the university or classes on the e-learning platform conducted using distance learning methods and techniques)

TYPE OF CLASS : WORKSHOP

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| --- | --- | --- | --- | --- | --- | --- |
| No. | Content of the course | Reference to subject-specific learning outcomes | Method of implementation (mark "X") | | | |
| ST | | NST | |
| **Classes at the University** | **Activities on  the platform** | **Classes at the University** | **Activities on  the platform** |
| 1. | Learning about the types of needs resulting from, among others, disabilities (vision, hearing, musculoskeletal, intellectual and autism spectrum) or age. | W1, U1, K2 | X |  | X |  |
| 2. | Universal design principles that take into account the needs and necessary support of each participant in the educational process, including students with disabilities (visual, hearing, musculoskeletal, intellectual and autism spectrum). | W1, U2, K1 | X |  | X |  |
| 3. | Universal design in the field of alternative and augmentative communication methods and providing diverse means of transmitting information. | W1, U3, K3 | X |  | X |  |
| 4. | WCAG and WCAG 2.1 standards | W2, U2, K1 | X |  | X |  |
| 5. | Ethics in contacts with persons with disabilities. | K2, K3 | X |  | X |  |
| 6. | Summary of classes and discussion of grades. |  | X |  | X |  |

3.5. Methods of verifying learning outcomes (indication and description of methods of conducting classes and verification of achievement of learning outcomes and method of documentation)

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| Subject Effects | Teaching methods | Methods of verifying learning outcomes | Documentation methods |
| KNOWLEDGE | | | |
| W1-W2 | Lecture and multimedia materials, discussions and analysis of materials | Preparation of a checklist for assessing the selected website in terms of accessibility, compliance with WCAG guidelines and adaptation to the needs of people with various functional limitations. | Assessed work |
| SKILLS | | | |
| U1-U3 | Lecture and multimedia materials, discussions and analysis of materials | Preparation of a checklist for assessing the selected website in terms of accessibility, compliance with WCAG guidelines and adaptation to the needs of people with various functional limitations . | Assessed work |
| SOCIAL COMPETENCES | | | |
| K1-K2 | Lecture and multimedia materials, discussions and analysis of materials | Preparation of a checklist for assessing the selected website in terms of accessibility, compliance with WCAG guidelines and adaptation to the needs of people with various functional limitations. | Assessed work |

3.6. Assessment criteria for the achieved learning outcomes

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| Learning effect | For a grade of 3 or "pass."  the student knows and understands/is able to/is ready to | For a grade of 3.5, the student knows and understands/is able to/is ready to | For a grade of 4, the student knows and understands/is able to/is ready to | For a grade of 4.5, the student knows and understands/is able to/is ready to | For a grade of 5, the student knows and understands/is able to/is ready to |
| W | 51-60% of knowledge indicated in learning outcomes | 61-70% of knowledge indicated in learning outcomes | 71-80% of knowledge indicated in learning outcomes | 81-90% of knowledge indicated in learning outcomes | 91-100% of knowledge indicated in learning outcomes |
| U | 51-60% of skills indicated in learning outcomes | 61-70% of skills indicated in learning outcomes | 71-80% of skills indicated in learning outcomes | 81-90% of skills indicated in learning outcomes | 91-100% of skills indicated in learning outcomes |
| K | 51-60% of skills indicated in learning outcomes | 61-70% of skills indicated in learning outcomes | 71-80% of skills indicated in learning outcomes | 81-90% of skills indicated in learning outcomes | 91-100% of skills indicated in learning outcomes |

3.7. Literature

**Basic**

1. W3c Process For Developing Standards, W: Https://Www.W3.Org/Wai/Standards-Guidelines/W3c-Process/ [Dostęp: 19.12.2020 R.]
2. Kowalski K., O Co Tyle Szumu? Projektowanie Uniwersalne, W: Formy Xyz, Nr 4/2020, W: Https://Formy.Xyz/Artykul/O-Co-Tyle-Szumu-Projektowanie-Uniwersalne/ [Dostęp: 16.02.2021 R.]
3. Kowalski K., Długa Droga Do Projektowania Uniwersalnego, W: Formy Xyz, Nr 4/2020, W: Https://Formy.Xyz/Artykul/Dluga-Droga-Do-Projektowania-Uniwersalnego/ [Dostęp: 16.02.2021 R.]
4. Rogalny K., Usłyszeć Interfejs – Projektowanie Serwisów Internetowych Dla Użytkowników Niewidomych, W: Https://Www.Webusability.Pl/ [Dostęp: 28.12.2020 R.]
5. Wytyczne Dla Dostępności Internetowej (Wcag) 2.1, W: Http://Wcag21.Fdc.Org.Pl/ [Dostęp: 28.12.2020 R.]
6. Jak Spełnić Wcag (Krótki Przewodnik), W: Https://Wcag.Lepszyweb.Pl/ [Dostęp: 28.12.2020 R.]
7. Wcag 2.1 W Skrócie W: Https://Www.Gov.Pl/Web/Dostepnosc-Cyfrowa/Wcag-21-W-Skrocie [Dostęp: 29.12.2020 R.]

**Supplementary**

1. Liszewska A., Projektowanie Dla Osób Starszych, W: Https://Www.Webusability.Pl/ [Dostęp: 29.12.2020 R.]
2. Batorski D., Czerniawska D., Fenrich W., Kowalik W., Kubicki P., Olcoń-Kubicka M., Zając J., Żychlińska M., Między alienacją a adaptacją. Polacy w wieku 50+ wobec Internetu, UPC Polska Sp. z o.o., Warszawa 2010.

4. Student workload - ECTS points balance

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| **Types of student activity** | **Student Load** | |
| **ST** | **NST** |
| **Classes requiring direct contact between the student and the academic teacher at the university premises** | **15** | **15** |
| Classes included in the study plan | 15 | 15 |
| **Student's own work** | **10** | **10** |
| Ongoing preparation for classes, preparation of project work/presentations/etc. | 5 | 5 |
| Preparation for passing classes | 5 | 5 |
| **TOTAL STUDENT HOURLY LOAD** | **25** | **25** |
| **Number of ECTS points** | **1** | **1** |

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| Last change date | 30/09/2024 |
| The changes were introduced | INF Education Quality Team |
| The changes were approved | Arkadiusz Gwarda, M.A. |