#### card of course

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| Subject name | Information technologies |

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 Karol Gac, mgr Przemysław Sujka |

2. General characteristics of the subject

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

1. Learning outcomes and course delivery
   1. Subject Objectives

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| No. | Subject Objectives |
|
| C1 | To familiarize students with the practical use of spreadsheets. |
| C2 | To familiarize students with the practical use of a text editor. |
| C3 | Familiarizing students with the principles of creating multimedia presentations and their practical mastery |
| C4 | Familiarizing students with information technologies used in everyday life |
| C5 | Developing skills in selecting appropriate IT tools to carry out one's own tasks, preparing students for conscious participation in the information society |

* 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 | How to use MS Word, MS Excel, MS PowerPoint in a practical way | INF\_W22 | X |  | X |  |
| W2 | Basics of text processing: editing and formatting documents, inserting lists and indexes, mathematical formulas, graphics, diagrams and tables. | X |  | X |  |
| W3 | basic operations in spreadsheets: entering and formatting data, performing calculations and addressing cells, using conditional formulas, functions | X |  | X |  |
| W4 | Rules for preparing multimedia presentations | X |  | X |  |
| After passing the course, the student is **able** to: | | | | | | |
| U1 | is able to prepare a document in a text editor containing a title page, table of contents, list of tables, drawings, maps | INF\_U12 | X |  | X |  |
| U2 | Can use spreadsheet functions (filters, references, mail merge, data protection, sorting, charts, pivot tables, data grouping, macros) | X |  | X |  |
| U3 | Perform spreadsheet calculations (using conditional formulas, mathematical, logical and statistical functions) | X |  | X |  |
| U4 | Can use MS PowerPoint and prepare a multimedia presentation | X |  | X |  |
| U5 | Is able to use and assess the usefulness of the tools and programs learned to perform activities related to the development of documentation. | X |  | X |  |
| After completing the course, the student is ready to take part in **social competences.** | | | | | | |
| K1 | Practical use of knowledge in the field of information technology and seeking specialist advice in the event of difficulties with operating IT tools | INF\_K01 | 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: LABORATORY

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| --- | --- | --- | --- | --- | --- | --- |
| No. | Content of the course | Reference to  the effects in question  learning | Method of implementation (mark "X") | | | |
| ST | | NST | |
| **Classes at the University** | **Activities on  the platform** | **Classes at the University** | **Activities on  the platform** |
| 1. | EXCEL: Familiarization with the program's operation and functions (entering and formatting data, performing calculations,filters, references, mail merge, data protection, sorting, charts, pivot tables, data grouping, macros ) and performing exercises | W1, W3, U2, K1 | x |  | x |  |
| 2. | EXCEL: learning conditional formulas, mathematical, logical and statistical functions and doing exercises | W1, W3, U3, K1 | x |  | x |  |
| 4. | WORD: Familiarization with the program's operation and functions. Practical use of the program for creating documents and writing a diploma thesis in accordance with the rules of text editing | W1, W2, U1, K1 | x |  | x |  |
| 5. | EXCEL: Colloquium I (Practical Tasks)  WORD: Colloquium II (Practical Tasks) | W1, W2, W3, U1, U2, U3, K1 | x |  | x |  |
| 6. | POWERPOINT: Familiarization with the program's operation and functions. Principles of creating multimedia presentations. | W1, W4, U4, K1 | x |  | x |  |
| 7. | POWERPOINT: preparing a multimedia presentation for assessment - final assignment | W1, U4, K1 | x |  | x |  |
| 8. | Summary of classes and discussion of grades. |  | x |  | x |  |

3.5. Methods of verifying learning outcomes (indicating and describing methods of conducting classes and verifying the achievement of learning outcomes, e.g. debate, case study, preparation and defense of a project, complex multimedia presentation, solving problem-solving tasks, situation simulations, study visit, simulation games + description of a given method):

Students, under the guidance of the instructor, will learn how to use programs such as MS Word, MS Excel, and MS Power Point. The instructor presents and discusses issues that will be used to apply knowledge during laboratory exercises in the following areas:

1. text editing elements
2. elements of creating a spreadsheet
3. elements of creating multimedia presentations, principles of creating multimedia presentations containing various types of multimedia elements

Passing:

Colloquium I - students perform tasks related to the practical use of MS Excel, Colloquium II - students perform tasks related to the practical use of MS WORD. Preparation of a presentation in MS POWERPOINT. The final grade is the average of the grades from the two colloquia and the grade for the presentation.

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| --- | --- | --- | --- |
| Subject Effects | Teaching methods | Methods of verifying learning outcomes | Documentation methods |
| KNOWLEDGE | | | |
| W1-W4 | Presentation and discussion of issues, performance of laboratory exercises. | Colloquium I and II, multimedia presentation | Evaluated files containing solved tasks from tests and multimedia presentation |
| SKILLS | | | |
| U1-U5 | Presentation and discussion of issues, performance of laboratory exercises. | Colloquium I and II, multimedia presentation | Evaluated files containing solved tasks from tests and multimedia presentation |
| SOCIAL COMPETENCES | | | |
| K1 | Presentation and discussion of issues, performance of laboratory exercises. | Colloquium I and II, multimedia presentation | Evaluated files containing solved tasks from tests and multimedia presentation |

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**

* Alexander M., Kusleika R., Walkenbach J., Cieślak P. Microsoft Excel 2019 PL: biblia, Helion, Gliwice 2019.
* Winston W. L., Machowski J. tł., Microsoft Excel 2019, Warszawa, 2019
* Lambert J., Frye C., Microsoft Office 2016. Krok po kroku, APN Promise, Warszawa, 2016

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. |