| 1. | Field of study                 | Biophysics   |  |  |
|----|--------------------------------|--|--|--|
| 2. | Faculty                        | Ity Faculty of Science and Technology                                |  |  |
| 3. | Academic year of entry         | lemic year of entry 2023/2024 (winter term), 2024/2025 (winter term) |  |  |
| 4. | Level of qualifications/degree | first-cycle studies  |  |  |
| 5. | Degree profile                 | general academic   |  |  |
| 6. | Mode of study                  | full-time  |  |  |

| 7. General information about t  | General information about the module   |  |  |
|---|--|--|--|
| Module name   | Modern Diagnostic Methods in Medicine  |  |  |
| Module code   | W4-BF-S1-6-23-26B  |  |  |
| Number of the ECTS credits  | 3  |  |  |
| Language of instruction   | Polish   |  |  |
| Purpose and description of the content of education                               | The module aims to expand students' knowledge of diagnostic methods used in medicine. Students participating in lectures and laboratories will gain knowledge of advanced tools, medical imaging, laboratory tests and modern diagnostic methods that enable precise identification and evaluation of various diseases and conditions of patients. |  |  |
| List of modules that must be completed before starting this module (if necessary) | not applicable   |  |  |

| 8. Lea | earning outcomes of the module   |                                    |                                |  |  |
|--------|--|------------------------------------|--------------------------------|--|--|
| Cod    | ode Description  | Learning outcomes of the programme | Level of competent (scale 1-5) |  |  |
| E1     | Knows and can explain modern diagnostic techniques used in medicine.   | W07                                | 1                              |  |  |
| E2     | The student can conduct research, analyze the results and prepare a report on the completed research.                  | U02                                | 1                              |  |  |
|        |  | U04                                | 1                              |  |  |
|        |  | U07                                | 1                              |  |  |
| E3     | The student knows and understands the principles of laboratory work, takes care of safety and hygiene in the biologica | U10                                | 1                              |  |  |
|        | laboratory, and conscientiously analyses experimental data.  | W10                                | 1                              |  |  |

| 9.  | Methods of cor | Methods of conducting classes |   |  |  |
|-----|----------------|-------------------------------|---|--|--|
|     | Code           | Category                      | Name (description)  |  |  |
| a01 |                |                               | Formal lecture/ course-related lecture a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided  |  |  |
| e01 |                |                               | Laboratory exercise / experiment [also conducted as fieldwork] a method of practical application of knowledge; implemented in three stages: the recognition of a problem induced by the task content, the formulation of the problem and the attempt to solve it accompanied by the assessment of the effects; the goal is to acquire skills, abilities and habits, and to consolidate the acquired knowledge so that |  |  |



|                       | it becomes operational; the laboratory method assumes greater independence of learners than carrying out an experiment |    |             |                                 |                               |
|-----------------------|--|----|-------------|---------------------------------|-------------------------------|
| 10. Forms of teaching |  |    |             |                                 |                               |
| Code                  | Name   |    | _           | Learning outcomes of the module | Methods of conducting classes |
| FZ1                   | lecture  | 15 | exam        | E1, E2                          | a01                           |
| FZ2                   | laboratory classes   | 15 | course work | E3                              | e01                           |

| 11. The studer | it's work, apart from participation in classes, inclu           | udes in particular:  |                         |
|----------------|---|--|-------------------------|
| Code           | Category  | Name (description)   | Is it part of the BUNA? |
| a02            | Preparation for classes   | Literature reading / analysis of source materials reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class  | Yes                     |
| a03            | Preparation for classes   | Developing practical skills activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)  | Yes                     |
| b01            | Consulting the curriculum and the organization of classes       | Getting acquainted with the syllabus content reading through the syllabus and getting acquainted with its content  | No                      |
| c02            | Preparation for verification of learning outcomes               | Studying the literature used in and the materials produced in class exploring the studied content, inquiring, considering, assimilating, interpreting it, or organizing knowledge obtained from the literature, documentation, instructions, scenarios, etc., used in class as well as from the notes or other materials/artifacts made in class | No                      |
| c03            | Preparation for verification of learning outcomes               | Implementation of an individual or group assignment necessary for course/phase/<br>examination completion<br>a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory<br>phase/element of the verification of the learning outcomes assigned to the course  | Yes                     |
| d01            | Consulting the results of the verification of learning outcomes | Analysis of the corrective feedback provided by the academic teacher on the results of the verification of learning outcomes reading through the academic teacher's comments, assessments and opinions on the implementation of the task aimed at checking the level of the achieved learning outcomes   | No                      |

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <a href="https://usosweb.us.edu.pl">https://usosweb.us.edu.pl</a>.