| 1. | Field of study | Biology |
|---|---|---|
| 2. | Faculty | Faculty of Natural Sciences |
| 3. | Academic year of entry | 2025/2026 (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 the module | |
|---|---|---|
| Module name | | Forest ecosystem |
| Module code | | 1BL_23_62 |
| Number of the ECTS credits | | 3 |
| Language of instruction | | |
| Purpose and description of the content of education | | The module is a summary of current knowledge about the formation of forest vegetation after the glaciation period, its contemporary diversity and threats. Individual issues discussed during the classes are related to the current geographical, ecological and altitudinal diversity of forests in Poland, their dynamics, biotic, abiotic and anthropogenic threats. The student becomes familiar with the differences in the functioning of managed and natural forests and with the life cycle of natural forests. Gain knowledge of contemporary threats to forests on a regional and global scale, including the relationship between deforestation and climate change |
| List of modules that must be completed before starting this module (if necessary) | | not applicable |

| 8. | Learning outcomes of the module | | | |
|---|---|---|---|---|
| **Code** | **Description** | | **Learning outcomes of the programme** | **Level of competenc (scale 1-5)** |
| K01 | Skillfully identifies environmental threats to forest ecosystems and is able to indicate the appropriate ways of acting to guarantee the preservation of their important environmental functions, including biodiversity and regulation of climatic, hydrological and soil conditions | | 1BL_K01 1BL_K02 1BL_K04 1BL_K05 | 3 3 3 2 |
| U01 | Understands the complexity of processes and phenomena occurring in the forest ecosystem, the role of forests in natural environmente and the impact of human activity on them, both at the local and global scale | | 1BL_U03 1BL_U04 | 4 3 |
| W01 | Student knows the contemporary ecological and geographical diversity of Polish forests and the factors that determine it. Identifies and characterizes abiotic and biotic threats of a natural and anthropogenic nature. He is able to distinguish the features of natural forest ecosystems from man-made forests and understands the importance of these forests for the protection of biodiversity and mitigation of the effects of climate warming. | | 1BL_W02 1BL_W04 1BL_W07 | 3 2 5 |

| 9. | Methods of conducting classes | |
|---|---|---|
| **Code** | **Category** | **Name (description)** |
| a01 | Lecture methods / expository methods | 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* |
| a03 | Lecture methods / expository methods | Description<br>*a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison* |
| b01 | Problem-solving methods | Problem-based lecture<br>*an analysis of a selected scientific or practical problem accompanied by its assessment and an attempt to provide a solution to the issues presented in the lecture as well as the indication of the consequences of the proposed solution* |
| b03 | Problem-solving methods | Activating method – educational games<br>*learning content in the guise of a rule- and/or principle-based game; conducted in a deliberately arranged situation based on the description of relevant facts and processes; learners compete with one another within the framework of rules laid down by the academic teacher; varieties include simulation games – involving a simulation of real situations; decision games – based on the decision-making process and the recognition of the consequences of the decisions made (e.g., a decision tree); psychological games – increasing the emotional-volitional component of the participants' attitudes* |
| b04 | Problem-solving methods | Activating method – discussion / debate<br>*an exchange of views supported by substantive arguments leading to a clash of different views, a compromise or the identification of common positions; it proceeds according to previously agreed-upon rules regarding the time, manner and turn-taking as well as the principles of civil discourse; a discussion is not a competition but aims at finding the best solutions or presenting different points of view; its varieties include brainstorming, Oxford-style debate, panel discussion, decision tree, conference discussion; a debate is an orderly dispute between supporters and opponents of a viewpoint, usually specialists in the field or pre-selected representatives of a group dealing with a common problem* |
| c07 | Demonstration methods | Screen presentation<br>*a presentation of synthetic image content using computer graphics, e.g., a series of slides or other multimedia forms, usually accompanied by a commentary; typical components of a screen presentation include text organized into bulleted points, charts, images and animations, sometimes sound effects or music; a multimedia illustration of course content presented in the form of a projected image* |
| e01 | Practical methods | Laboratory exercise / experiment<br>*[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* |
| e06 | Practical methods | Observation<br>*also conducted as fieldwork; a method of watching phenomena, objects or people in a systematic/planned way in order to gain knowledge about them; perceptual separation of elements of a model action as an element of learning through imitation; a complex system of cognition based on sensory experiences* |
| e08 | Practical methods | Practice-as-research<br>*also conducted as fieldwork; an activity aimed at confronting the acquired theory with practice through its practical application; students situate themselves in the reality they observe, study and transform through the prism of the theory; the method of practical classes is dominated by the application of knowledge to solving practical tasks* |
| f01 | Methods of self-learning | Self-education<br>*a method which involves independent acquisition of knowledge, skills and social competences, extending their scope and quality; complementary to the learning process taking place in class; taking on the task of developing and adjusting qualifications on one's own; self-study* |
| f02 | Methods of self-learning | Individual work with a text |

| | | searching for and acquiring new information using textbooks and other written sources (including their digital versions); searching for texts, selecting fragments for analysis/interpretation, using other texts to solve a problem related to the studied issue |
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| 10. | Forms of teaching | | | | | |
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| **Code** | | **Name** | **Number of hours** | **Assessment of the learning outcomes of the module** | **Learning outcomes of the module** | **Methods of conducting classes** |
| 1 | | lecture | 15 | course work | K01, U01, W01 | a01, a03, f01, f02 |
| 2 | | field practice | 6 | course work | K01, U01, W01 | e01, e06, e08 |
| 3 | | practical classes | 9 | course work | K01, U01, W01 | a03, b01, b03, b04, c07 |

| 11. | The student's work, apart from participation in classes, includes in particular: | | | |
| --- | --- | --- | --- | --- |
| **Code** | | **Category** | **Name (description)** | **Is it part of the BUNA?** |
| a02 | | Preparation for classes | Literature reading / analysis of source materials<br>*reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class* | No |
| a03 | | Preparation for classes | Developing practical skills<br>*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<br>*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<br>*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 |

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