**SYLLABUS**

**regarding the qualification cycle FROM 2021To2025**

1. Basic Course/Module Information

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| --- | --- |
| Course/Module title | *Knowledge about habitat* |
| Course/Module code \* |  |
| Faculty (name of the unit offering the field of study) | *Institute of Agricultural Sciences, Land Management and Environmental Protection* |
| Name of the unit running the course | *Department of Nature Conservation and Landscape Ecology* |
| Field of study | *Environmental protection* |
| Qualification level | *first level* |
| Profile | *academic* |
| Study mode | *stationary* |
| Year and semester of studies | *I year 1 semester* |
| Course type | *basic* |
| Language of instruction | *english* |
| Coordinator | *dr inż. Iwona Makuch-Pietraś* |
| Course instructor | *dr inż. Iwona Makuch-Pietraś* |

\* - as agreed at the faculty

1.1.Learning format – number of hours and ECTS credits

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Semester  (n0.) | Lectures | Classes | Colloquia | Lab classes | Seminars | Practical classes | Internships | others | **ECTS credits** |
| 1 |  |  |  | 30 |  |  |  |  | 5 |

1.2. Course delivery methods

- conducted in a traditional way

- involving distance education methods and techniques

1.3. Course/Module assessment (exam, pass with a grade, pass without a grade)

pass with a grade

2. Prerequisites

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| *Chemical and botanical knowledge* |

3. Objectives, Learning Outcomes, Course Content, and Instructional Methods

3.1. Course/Module objectives

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| --- | --- |
| O1 | *Learning soil and climate factors and links between them.* |
| O2 | *Recognize the influence of factors on habitat conditions and functioning of the biocenosis.* |
| O3 | *Practice the ability to value worth of the habitat and its resistance to degradation on the base of self-determinate soil quality coefficient.* |

3.2. Course/Module Learning Outcomes (to be completed by the coordinator)

|  |  |  |
| --- | --- | --- |
| Learning Outcome | The description of the learning outcome  defined for the course/module | Relation to the degree programme outcomes |
| LO\_01 | *lists and describes the elements of the habitat and their interactions* | *(K\_W01, K\_W07, K\_W09)* |
| LO\_02 | *indicates the method for evaluation of basic worth parameters of habitat and soil quality* | *(K\_W02, K\_W03, K\_W07)* |
| LO\_03 | *be able to perform simple laboratory analysis and evaluate environmental soil values on this base* | *(K\_U01, K\_U02, K\_U04)* |
| LO\_o4 | *interpret the state of the habitat and its threats, based on laboratory tests* | *(K\_U04, K\_U06, K\_U08)* |
| LO\_o5 | *complete and present a presentation of optional habitat on the source materials* | *(K\_U09, K\_U12)* |
| LO\_o6 | *the ability of cooperation in group during laboratory analysis and with elaboration the environmental habitat report* | *(K\_U10)* |
| LO\_o7 | *demonstrate the responsibility for the equipment, and exhibits and safety in work* | *(K\_K01)* |

**3.3. Course content (to be completed by the coordinator)**

1. Classes, tutorials/seminars, colloquia, laboratories, practical classes

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| Content outline |
| *Basic properties and presentation of the most common minerals; systematic and identifying characteristics of rock and geomorphological conditions* |
| *Basic physical and biological properties and their impact on soil fertility* |
| *Determination of soil mechanical composition, soil reaction, content of carbonates and the quantity, quality of organic substances, hydrolytic acidity, total exchangeable bases and sorption capacity – laboratory exercises* |
| *Recognition of basic soil types* |
| *Water condition in habitats* |
| *Influence of climate on habitat conditions* |
| *Presentation of optional habitat* |

3.4. Methods of Instruction

*Laboratory classes: conducting experiments*

4. Assessment techniques and criteria

4.1 Methods of evaluating learning outcomes

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| --- | --- | --- |
| Learning outcome | Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes) | Learning format (lectures, classes,…) |
| *LO-01* | *report, oral presentation* | *laboratory* |
| *LO-o2* | *report, oral presentation* | *laboratory* |
| *LO-o3* | *observation during classes, report* | *laboratory* |
| *LO-o4* | *report* | *laboratory* |
| *LO-o5* | *observation during classes, oral presentation* | *laboratory* |
| *LO-o6* | *observation during classes, report* | *laboratory* |
| *LO-o7* | *observation during classes* | *laboratory* |

4.2 Course assessment criteria

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| *final degree is based on laboratory report and by a multimedia presentation* |

5. Total student workload needed to achieve the intended learning outcomes

– number of hours and ECTS credits

|  |  |
| --- | --- |
| Activity | Number of hours |
| Scheduled course contact hours | 30 |
| Other contact hours involving the teacher (consultation hours, examinations) | 10 |
| Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.) | 85 |
| Total number of hours | 125 |
| Total number of ECTS credits | 5 |

\* One ECTS point corresponds to 25-30 hours of total student workload

6. Internships related to the course/module

|  |  |
| --- | --- |
| Number of hours | *-* |
| Internship regulations and procedures | *-* |

7. Instructional materials

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| Compulsory literature:  *Keefer, R. F. 2000 Handbook of Soils for Landscape Architects, New York Oxford University Press*  *Reszel H., Reszel R. (translation by Iwona Makuch-Pietraś) 2010 Method book for laboratory exercise from Knowledge about habitat. Department of Agrobiology and Environmental Protection UR, typescript ss. 21*  *Sposito, Garrison 2008 The Chemistry of Soils Edition: 2nd ed. Oxford : Oxford University Press.* |
| Complementary literature:  [*Coleman, David C.*](javascript:__doLinkPostBack('','ss~~AR%20%22Coleman%2C%20David%20C.%22%7C%7Csl~~rl','');)*,* [*Crossley, D. A.*](javascript:__doLinkPostBack('','ss~~AR%20%22Crossley%2C%20D.%20A.%22%7C%7Csl~~rl','');)*,* [*Hendrix, Paul F.*](javascript:__doLinkPostBack('','ss~~AR%20%22Hendrix%2C%20Paul%20F.%22%7C%7Csl~~rl','');)*2004 Fundamentals of* ***soil******Ecology*** *Amsterdam : Elsevier Academic Press.* |

Approved by the Head of the Department or an authorised person