SYLLABUS

General information about the course

Course title

Ecology and nature conservation.

Unit name

Institute of Nature Conservation Polish Academy of Science.

Form of study

Full-time.

Type of course, number of hours

Lectures, seminars, 15 hours per semester.

Course type

Compulsory classes.

Year and semester

Winter semester 2025/2026.

Coordinator

Dr hab. Piotr Skórka.

Teaching person

Dr hab. Piotr Skórka.

Aim of the course

Basic understanding links between ecology and nature conservation.

Prerequisites/Requirements

Basic knowledge in biology and ecology at the 2nd level of the studies.

Learning outcomes

Knowledge

A doctoral candidate, based on his knowledge, will be able to characterize the basic problems of nature protection in the world and in Poland. The PhD student will be able to distinguish between ecological indicators of biodiversity such as species richness, genetic diversity, phylogenetic diversity, functional diversity and determine which one is important in the practical actions of nature protection.

Skills

Knowledge of the biological basis of nature protection. Understanding the processes that lead to the emergence of biodiversity at various spatial and temporal scales.

Social competences

An assessment of the form and value of discussions and prepared materials will be conducted. Learning to discuss current issues of nature protection on a local and global scale. The PhD student will acquire the ability to explain and present arguments why nature protection is important.

Program content

The course includes:

1. An attempt to find a coherent definition of nature protection.
2. Biodiversity components and their interrelationships.
3. Identification of global threats to biodiversity.
4. Using open data sources to solve ecological problems and find solutions in nature conservation.

Teaching methods

Lecture with multimedia presentation – an orderly presentation of issues related to ecology and nature protection. Presentation of scientific tools used in selected problems of nature protection.

Exercises/discussions – learning how to use open databases to solve ecological problems. Systematic discussion panel on current and hot topic in ecology and nature conservation. Learning how to prepare a report in the form of a scientific publication on a selected topic.

Evaluation

Credit for a grade.

The condition of passing the course is participation in exercises and lectures, as well as making a report from the conducted research. Moreover, the final exam will be in form of a test.

Methods and criteria of assessment

Final credit from the material presented in lectures and exercises; presenting an essay on a selected topic; continuous assessment during classes (scoring points in each class), grade from notes prepared by the PhD student and activity in the discussion during exercises.

Workload required to achieve learning outcomes

Participation in lectures – 5 hours.
Participation in exercises – 10 hours.
Individual preparation for classes – the PhD candidate is working on selected fragments of the report included in the publication – 10 hours.
Self-preparing to pass exam – 10 hours.
Participation in the exam – 1 hours.
1 ECTS

Language

English.

Literature

Basic literature:

1. Sutherland, W.J., Fleishman, E., Mascia, M.B., Pretty, J. and Rudd, M.A., 2011, Methods for collaboratively identifying research priorities and emerging issues in science and policy, Methods in Ecology and Evolution, 2, 238–247.
2. Culina A., Baglioni, M., Crowther, T.W. et al. 2018. Navigating the unfolding open data landscape in ecology and evolution. Nature Ecology and Evolution 2, 420–426.
3. Pullin A.A. 2004. Conservation Biology (Biologiczne podstawy ochrony przyrody). PWN, Warszawa.

Signatures

Signature of the coordinator .....

Signature of the Head of Doctoral School .....

Passing rules/Exam rules

1. The exam starts after finishing the course.
2. The exam is conducted by the lecturer.
3. The exam protocol is in the form of a test.
4. The examination test contains open and closed questions – single or multiple choice points according to the rules:
   a. 2 points are awarded for answering an open question;
   b. 1 point for answering a single-choice question;
   c. for the answer to the question that has been awarded, there is 0.5 point for each partial answer.
5. The grade for the results obtained from the sum of points obtained in the examination test and determined on the basis of the principles:

Percentage share of points (%) achievable	Grade oral	Grade figure
91 – 100	excellent (bdb)	5,0
81 – 90	very good (p.db)	4,5
71 – 80	good (db)	4,0
61 – 70	fairly good (p.dst)	3,5
55 – 60	acceptabe (dst)	3,0
0 – 54	unacceptabe (ndst)	2,0

6. Unexcused absence from the exam results in receiving a grade of "2.0" (unacceptable).
7. The exam is passed if 55% of the total points possible is obtained.
8. Positive exam grades cannot be improved to a higher grade.
9. If a doctoral student receives an unsatisfactory grade in an examination, he or she is entitled to only one re-sit examination during the academic year (see Regulations for doctoral studies).
10. The grade is entered into the student's index book by the person conducting the examination.