

Subject card

Subject name and code	Practical identification of seed plants, PG_00179637						
Field of study	Environmental Protection						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2026/2027		
Education level	Master's studies		Subject group		Optional subject group		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	2		ECTS credits		3.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Przemysław Baranow				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	45.0	0.0	0.0	45
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	45		7.0		25.0	77
Subject objectives	To learn and understand the methods used in plants identification. Learning about the morphology of plants and their morphological differentiation. Reviewing selected systematic groups with regard to their taxonomic characteristics.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OŚMU2_K01] Behaves in a professional manner at all times; bears full responsibility for the actions taken relating to the protection of the environment and respects the principles of professional ethics and principles of intellectual honesty.	- Demonstrates a sense of responsibility for actions aimed at protecting the environment - Guided by professionalism and ethical principles - Follows the principles of intellectual honesty (K01)	[SK1] oral statement/conversation/discussion [SK2] presentation/project/paper/report [SK6] demonstration of practical skills [SK8] observation of student's independent or team work
	[OŚMU2_W04] Chooses methods, techniques and research tools used in environmental protection.	- Proficient in plant identification tools, including the use of dichotomous keys and a binocular microscope; performs detailed morphological analyses (W04)	[SW2] presentation/project/paper/report [SW5] implementation of a problem task
	[OŚMU2_U03] Plans and performs research tasks in the field or laboratory and interprets research results on environmental issues (working individually or in a team assuming various roles, including managerial functions).	Designs and conducts research activities, both in the laboratory and in the field, focusing on plant morphology and identification (U03)	[SU2] presentation/project/paper/report [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
	[OŚMU2_U05] Searches, selects and analyses the literature achievements of environmental sciences, including scientific journals and databases, reading and understanding scientific texts in her/his native language and in English.	- Demonstrates proficiency in using literature essential for plant identification—especially dichotomous keys—and for characterizing the morphological diversity of plant species found in Poland (U05)	[SU2] presentation/project/paper/report [SU5] implementation of a problem task [SU8] observation of student's independent or team work
	[OŚMU2_K07] Is willing to undertake individual and team activity; to professionally plan and organise its course and set priorities for their actions.	- Capable of effectively prioritizing tasks to accomplish objectives defined either by themselves or the team they are part of (K07)	[SK8] observation of student's independent or team work
Subject contents	Research techniques and methods used in plant identification. The concept of a taxonomic character criteria that a character should meet; sources of taxonomic characters used in plant identification. Identification keys types, structure, and rules for using them in taxon identification. Morphology of seed plants, including modifications of plant organs depending on their functions and adaptations to various pollination and seed dispersal strategies. The importance of these traits in plant classification and identification. Morphological variation as a basis for classification and distinguishing taxa at different ranks. Selected systematic groups of plants characteristics, taxonomic position, diagnostic features of families and species. Plant identification based on taxonomic characters, using herbarium specimens and fresh material.		
Prerequisites and co-requisites	None		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Assessment 1	51.0%	15.0%
	Assessment 2	51.0%	15.0%
	Assessment 3	51.0%	15.0%
	Average of worksheet grades	51.0%	15.0%
	herbarium collection	51.0%	20.0%
	plant identification in the field	51.0%	20.0%
Recommended reading	Basic literature	A.1. Used during classes Goet J.-D. 1998. Pędy i pąki, rozpoznawanie drzew i krzewów w okresie spoczynku. Multico, Warszawa. Kucharczyk S. 2009. Flora wiosenna lasów. Bieszczadzki Park Narodowy. Rothmaler W. 2009. Exkursionflora von Deutschland, 3. Springer-Verlag Berlin, Heidelberg. Rutkowski L. 2004. Klucz do oznaczania roślin naczyniowych Polski niżowej. PWN, Warszawa. Szwejkowska A., Szwejkowski J. 2009. Botanika. PWN, Warszawa.	
		A.2. Studied independently by the student Szwejkowska A., Szwejkowski J. 2009. Botanika. PWN, Warszawa	
	Supplementary literature	None	
	eResources addresses		

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable

Document generated electronically. Does not require a seal or signature.