

SYLLABUS
Spring semester 2026/2027
Lecturer: dr Kinga Nowak, prof. dr hab. Grzegorz Iszkulo

Title of the course	Dendrology
Institution where the course will take place	Institute of Dendrology Polish Academy of Sciences
Language	English
Learning objectives	P8S_WG - The student gains knowledge about the morphology and systematics of woody plants. The student is familiar with the basic knowledge of plant ecology, geographical range, origin, and importance in ecosystems and green areas. The student broadens his knowledge of the past and today's role of the botanical garden, dendrological garden, and herbarium. P8S_UW - The student knows methods of plant identification. The student identifies basic taxa of woody species on the basis of shoots at the stage of winter dormancy, leafy shoots, and generative organs (flowers, fruits, cones). The student has basic knowledge about the ecology and geographical range (especially with the range limit in Poland) of woody species. The student knows alien, native, invasive, and protected species in the flora of Poland. P8S_KK - Student understands the need for constant updating of knowledge from recognized scientific sources on dendrology and is ready to verify knowledge across various sources. P8S_UK - Student understands and appreciates the significance of scientific investigations and is ready to critically evaluate the scientific achievements in dendrology. P8S_KR - Student is aware of diverse opinions on challenges in dendrology and can communicate with them, knows and appreciates the rules of cultural discussion. P8S_UU / P8S_UU - Student works in a group, organizes safe exercises, participates attentively in class, and applies lecturers' recommendations.
Learning outcomes, according to Attachment 2 to the Programme of the Study (valid from October 1st 2026)	P8S_WG (pkt. 1, 2, 3), P8S_UW (1, 2, 3), P8S_KK (pkt. 1, 2), P8S_UK (pkt. 3), P8S_KR (1, 2, 3), P8S_UU / P8S_UU (pkt. 1, 2)
Type of the course	Obligatory lecture
Semester/Year	Spring semester 2026/2027
Name of the lecturer	dr Kinga Nowak, prof. dr hab. Grzegorz Iszkulo

Name of the examiner	credits: prof. dr hab. Grzegorz Iszkuło
Teaching methods	Presentation and didactic discussion. Student: own work with the literature and presentation
Attendance requirements	Knowledge of the basics of biology. Attendance is obligatory, except for documented earlier planned participation in conferences, training courses, and scientific workshops related to the implementation of the doctoral thesis, sick leave, a significant life-event, or an emergency.
Number of ECTS points	3 ECTS
Number of lectures	8
Didactic methods	Stationary lecture with multimedia presentation (ID PAN) and identification of woody plants (Kórnik Arboretum).
Methods of verification and assessment of learning outcomes	Assessment methods: - written test– P8S_W and P8S_K - discussions and active participation in lectures P8S_U
Conditions of a positive evaluation	Full attendance and a positive grade from the exam.
Course content	Basics of morphology. Methods of preserving herbarium materials. The importance of herbaria. Characteristics and identification of coniferous woody plants. Characteristics and identification of trees and shrubs in winter dormancy. Characteristics and identification of deciduous woody plants. Collections of the Kórnik Arboretum. Arboriculture and methods of protection of old trees. Basics of dendrochronology. Trees and shrubs of the Mediterranean region. Biology and identification of taxa of the genus <i>Rubus</i> .
Literature of the course materials	Seneta W, Dolatowski J, Zieliński J. 2021. Dendrologia. Warszawa: Wydawnictwo Naukowe PWN. Krusmann G. 1978. Handbook of broadleaved trees and shrubs. Verlag Paul Parey. Berlin and Hamburg Krusmann G. 1983. Handbook of conifers. Verlag Paul Parey. Berlin and Hamburg Luboš Úradní L. 2014. Forest dendrology. Faculty of Forestry and Wood Technology. https://akela.mendelu.cz/~xcepl/inobio/skripta/Forest_Dendrology.pdf Monografie Instytutu Dendrologii z serii Nasze Drzewa Leśne.

	Mattheck, Claus, and Helge Breloer. The body language of trees: a handbook for failure analysis. HMSO Publications Centre, 1994. Rutkowski L. 2006. Klucz do oznaczania roślin naczyniowych Polski niżowej. Wyd. Naukowe PWN, Warszawa.
--	---