

Course name:	Propagation of ornamental plants	ECTS	3
Translation of the course name into English:	-		
Study field:	General Horticulture		

Language of lectures:	English	Study level: Master of science	
Study form:	<input checked="" type="checkbox"/> stationary <input type="checkbox"/> extramural	Status of lectures:	<input type="checkbox"/> primary <input type="checkbox"/> obligatory <input type="checkbox"/> directional <input checked="" type="checkbox"/> facultative
Semester number: 2		<input checked="" type="checkbox"/> winter semester <input type="checkbox"/> spring semester	
Academic year from which the description applies		2021/2022	Catalog number: OGR-O2-S-2Z16.27 ang

Course coordinator:	Prof. Andrzej Pacholczak		
Lecturers:	Prof. Andrzej Pacholczak		
Unit running the course:	Department of Ornamental Plants		
Unit ordering the course:	Faculty of Horticulture		
Assumptions, objectives and description of the course:	The ornamental nursery production is the fastest growing discipline of horticulture therefore practice needs and will need skilled specialists able to prepare plant material for further production therefore the aim of the subject will be to give students basic knowledge of principles of plant propagation. The purpose of practical training is to develop by the student the skills in basic propagation methods of ornamentals and to prepare her/him to work in a nursery, plant collections or in vitro laboratory. Practical classes will be performed in the nursery and greenhouse of DOP – students will be shown all the propagation methods and perform themselves all these which will be possible to do during the study cycle..		
Didactic forms, number of hours:	Lectures: hours 15 Practical classes: hours 15		
Teaching methods:	Plant collections, greenhouse and nursery of DOP, tools needed to learn all the propagation techniques Lectures – PP presentations containing the above material		
Formal requirements and prerequisites:	Botany, Plant physiology, dendrology		
Learning outcomes:	Knowledge: W_01 - knows the specific methods of propagation of woody plants in Polish nurseries W_02 – knows the conditions suitable for propagation ornamental shrubs and trees	Skills: U_01 - knows how to make a cuttings and perform a grafting U_02 – can create conditions suitable for seed sowing and to perform different presuming treatments U_03 - is able to work in a team	Competences: K_01 - is open to new technological solutions
The way of verification of learning outcomes :	Effect W_01, W_02, U_01, U_02, K_01 - evaluation test Effect W_01, W_02, U_01, U_02, U_03, K_01 - evaluation of manual actions during plant propagation		
Form of documentation of achieved learning outcomes :	Results of the evaluation test		
Elements and weights affecting the final grade:	Test results – 50%, evaluation of manual action – 50%		
Place of classes:	Teaching rooms, laboratory, nursery and greenhouse		
Basic and supplementary literature : 1. Davis T.D., Haissig B.E., Sankhla N. 1988. Adventitious root formation in cuttings. Advances in Plant Sciences Series Discorides Press Portland, Oregon USA. 2. Hartmann H.T., Kester D.E., Davies F.T., Geneve R.L. 2002. Plant propagation. Principles and practices. Prentice Hall. 3. Kroin J. 2009. Propagation of plants from cuttings using rooting solutions by foliar methods. Combined Proceedings, International Plant Propagator's Society 59: 437-453. 4. Macdonald B. 1989. Practical woody plant propagation for nursery growers. Timber Press, Portland, Oregon. 5. Szydło W. 2018. Szkółkarstwo ozdobne – wybrane zagadnienia. Agencja Promocji Zieleni, Warszawa.			
COMMENTS			

Quantitative indicators characterizing the module / object:

Estimated total number of student work hours (contact and own work) necessary to achieve the assumed learning outcomes - on this basis, complete the ECTS field:	95 h
The total number of ECTS points that a student receives in classes requiring direct participation of academic teachers or other lecturers:	1,5 ECTS

Table of compliance of the directional learning outcomes with the effects of the course:

Effect category	Learning outcomes for the course:	Reference to learning outcomes specific for study program on particular study field (direction)	The impact of course on the directional effect *)
Knowledge - W_01	knows the specific methods of propagation of woody plants in Polish nurseries	K_W04	3
Knowledge - W_02	knows the conditions suitable for propagation ornamental shrubs and trees	K_W01; K_W02; K_W05	2
Skills - U_01	knows how to make a cuttings and perform a grafting	K_U01	3
Skills - U_02	can create conditions suitable for seed sowing and to perform different presuming treatments	K_U04	2
Skills - U_03	is able to work in a team	K_U11	1
Competences - K_01	is open to new technological solutions	W_K01	2