

Polish name of the course:	Hodowla roślin i nasiennictwo dla rolnictwa ekologicznego	ECTS	2,0
English name of the course:	Plant breeding and seed material for OA		
Name of study	Organic Agriculture and Food Production		

Language: English		Study level: I	
Study status: <input checked="" type="checkbox"/> full-time <input type="checkbox"/> part-time	Status of the course: <input checked="" type="checkbox"/> basic <input type="checkbox"/> professional	<input checked="" type="checkbox"/> obligatory <input type="checkbox"/> elective	Semester: 4 <input type="checkbox"/> winter semester <input checked="" type="checkbox"/> spring semester
description applies from the academic year (year):		2019/2020	Catalog number : ROL-ER-1S-03Z-02

Coordinator of the course ⁵	Dr Aleksandra Orzeszko-Rywka		
Teachers :	Employees from the Department of Plant Physiology		
Conducting unit:	Faculty of Agriculture and Biology, Department of Plant Physiology		
Unit ordering classes :	Faculty of Agriculture and Biology.		
Goals and description of the course:	Goal: To provide students with the basic information on a plant breeding for organic agriculture and organic seed production. Description: To provide students with the knowledge of basic rules of classic genetics, basics of plant breeding for organic agriculture and seed production and technology. Students will learn methods of breeding which are accepted for organic agriculture, plant varieties adapted to organic cultivation, local varieties and their importance for organic agriculture. This knowledge will allow students to understand better the contents of such courses as: organic crops, processing of organic plant raw materials.		
Didactic forms, number of hours :	W - lecture, hours15 C - auditorium exercises, hours15 LC - laboratory exercises, hours PC – design (project) exercises, hours TC - field exercises, hours ZP - apprenticeships, hours		
Teaching methods :	Lectures with the use of PowerPoint presentations by teachers from the Department and invited speakers from Certification Unit, seminar classes, field trip to a plant breeding company, consultations.		
Formal requirements and initial assumptions :	Botany, Basics of plant biochemistry and physiology. Students should have a basic knowledge of genetics, plant cell and tissues structure.		
Learning outcomes :	Knowledge: W1 - Student has a basic knowledge of biological and physiological processes which are taking place in the plant and plant crops taking into account factors determining the size and quality of the yield. W2 – Student knows and understands the basic methods, techniques and technologies as well as tools and materials allowing for the maximization of yield and its quality in the conditions of organic farming.	Skills: U1 – Student identifies and analyzes phenomena and interactions between achievements of natural sciences, especially in the field of organic farming, including organic food. U2 - the ecological conditions of plant production using the knowledge of methods, techniques, technologies, tools and materials as well as the potential of the environment in order to maximize the size and quality of the yield.	Ccompetence : K1 – Student is aware of the importance of social, professional and ethical responsibility for ecological production of high quality food, animal welfare and shaping and condition of the natural environment.
The verification way of learning outcomes :	Written tests during seminary part, discussion, written exam		
Form of documentation achieved learning outcomes:	- Students' grade cards, that include grades for written tests and for experiment performance - Exam papers including questions and given grades		
Elements and weights with the impact on the final grade:	- Grade for written tests taken during seminary part – 30% - Participation in discussion – 20% - Grade for written exam from lecture content – 50% It is mandatory to collect minimum 51% of grade points for experiments performance and for written tests to be able to take written exam.		
Place for course:	lecture – lecture rooms, seminar part – seminar room.		
Basic and complementary literature: 1. Organic Crop Breeding: Lammerts van Bueren, Edith T.; Myers; Myers, James Robert 2012, ISBN: 978-0-470-95858-2 2. Handbook of Seed Phvsiology: ed. Benech-Arnold Roberto L., Sanchez Rodolfo A. 2004. ISBN: 1-56022-929-2			

Comments

Quantitative indicators characterizing the module / course:

Estimated total number of student work hours (contact and own work) necessary to achieve the expected learning outcomes – based on this, complete the ECTS field:	77
The total number of ECTS points that a student obtains in classes requiring direct participation of academic teachers or other persons conducting classes (consultations, cooperation with a supervisor):	ECTS 2

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

effect category	Learning outcomes for the course:	Reference to effects for the study program for the field of study	The impact of the course on the field effect ^{*)}
Knowledge –W1	Student has a basic knowledge of biological and physiological processes which are taking place in the plant and plant crops taking into account factors determining the size and quality of the yield.	K_W05 / P6S_WG, P6S_WG(R1), P6S_WG(R4)	1
Knowledge –W2	Student knows and understands the basic methods, techniques and technologies as well as tools and materials allowing for the maximization of yield and its quality in the conditions of organic farming	K_W08 / P6S_WG, P6S_WG(R2), P6S_WG(R4)	3
Skills –U1	Student identifies and analyzes phenomena and interactions between achievements of natural sciences, especially in the field of organic farming, including organic food.	K_U02 / P6S_UW, P6S_UW(R2), P6S_UW(R3)	2
Skills – U2	the ecological conditions of plant production using the knowledge of methods, techniques, technologies, tools and materials as well as the potential of the environment in order to maximize the size and quality of the yield.	K_U13 / P6S_UW, P6S_UW(R2), P6S_UW(R3), P6S_UO	3
Competence –K1	Student is aware of the importance of social, professional and ethical responsibility for ecological production of high quality food, animal welfare and shaping and condition of the natural environment.	K_K04 / P6S_KO, P6S_KR	2

*)

3 - advanced and detailed,

2 - significant,

1 - basic,