

# SYLLABUS

Name of the course (as specified in the approved curriculum) <b>New technologies in seed processing</b>		Number of ECTS Credits  <b>5</b>
Name of the course in Polish <b>Nowe technologie w nasiennictwie</b>		
Unit providing the course (Department/Institute) <b>Department of Phytopathology, Seed Science and Technology</b>		
Course leader <b>Prof. Roman Hołubowicz</b>		
Field of study <b>Horticulture: Seed Science and Technology</b>	Level <b>II</b>	Semester <b>1</b>
<b>TYPE OF CLASSES</b> (course load)		
- Lectures		20
- Outdoor classes		30
- Contact hours		30
- Self-study		45
Total number of hours		125
<b>OBJECTIVE OF THE COURSE</b>		
Learning about new technologies concerning seed processing		
<b>TEACHING METHODS</b>		
Lectures, classes, visits to the plant breeding and seed production company		
<b>Course learning outcomes</b>		The reference to field of study outcomes
Knowledge	O1. Student understands importance of new technologies in seed sector for agriculture and environment; O2. Student knows basic directions of development of technologies for seed sector.	H2_K02 H2_K05
Skills	O3. Student can evaluate usefulness a simple technology for seed sector. O4. Student can describe effect of various environmental and production factors on usefulness of a new technology in seed sector.	H2_S03 H2_S11
Social skills	O5. Student is aware of importance of professional education. O6. Student can work in a group and take in it various activities.	H2_C01 H2_C02
<b>Methods of evaluation of outcomes achievement</b> Examination, part exam,		Symbols of course learning outcomes O1, O2, O3, O4, O5, O6
<b>TEACHING CONTENT</b>		
<b>Lectures</b> Market and overproduction of seeds. Domination of marketing and logistics. Strategy of lowering costs in seed company management. New technologies in plant breeding: double haploids, flowing cytometry, traits markers, transfer of gens. New technologies in seeds processing: harvesters to collect cucumber and carrot seeds, rinsing tubes for cucurbit seeds, pressers for unthreshed bean and radish pods, horizontal belt machines, photocell separators, sets for precision pelleting and incrusting of the new generation.		
<b>Classes</b> Visits paid to domestic and foreign plant breeding and seed production companies with newest technologies for seed sector. Preparing a literaturę review on the newest research on improving seed quality and effectiveness of their processing.		
<b>The course completion criteria and methods</b> Passing an exam and assignments		Percent of a final grade 70% - exam 30 % - classes
<b>RECOMMENDED LITERATURE</b>		
Hołubowicz R. 2015. Seed production and technology. Wyd. UP w Poznaniu.		

