Subject name	**Ecological Methods of Plant Protection**	
Subject code	**E.1z.ECO.SC.ECTIE.O (winter)** **E.1l.ECO.SC.ECTIE.O (summer)**	
Department	**Department of Plant Protection**	
Faculty	**Faculty of Biotechnology and Horticulture**	
Subject supervisor/Lecturer	**Dr hab. Elżbieta Wojciechowicz-Żytko, dr hab. Jacek Nawrocki**	
General information	**Teaching period**	**1 semester/ winter or summer**
	ECTS credit	**4**
	Lectures total	**30 h**
	Lab classes	**-**
Objective and general description	Identification of pests and diseases, forecasting of plant pests and diseases presence; non-chemical methods of plant protection against pests and diseases; the list of plant protection products qualified for use in organic farming; plant extracts in the protection of plants against pests and diseases.	
Lectures **10 x 3 hours**	1. Basic information on organic production. 2. Plant protection in biodynamic, organic and ecological agriculture. 3. The importance of biodiversity of species of plants and animals in ecological plant protection against pests. 4. The role of wild plants as sources of agrophages. 5. Agronomic and mechanical method in the protection plants against pests and diseases. 6. The use of mixed crops, water extracts and natural pesticides in reducing agrophages. 7. Other non-chemical methods of plant protection. Methods for detection and forecasting of pests 8. Beneficial animals limiting the number of pests. 9. Use of the of beneficial microorganisms in crop protection. **10.** The impact of pesticides on beneficial organisms.	
Lab practicals	-	

Literature	Van Emden H. F., 1989. Pest control. Edward Arnold. A division of Hodder&Stoughton, 117p. Van Emden H.F. , Harrington R., 2007. Aphids as crop pests. CAB International, 717p. Agrios G. 2004. Plant Pathology. Academic Press, 952 p. BioControl, Journal of the International Organization for Biological Control. Springer