

Subject name	Farming Systems	
Subject code	R.9.s2.FAR.SM.RROXY	
Department	Agrotechnology and Agricultural Ecology	
Faculty	Agriculture and Economics	
Subject supervisor/Lecturer	Dr Agnieszka Synowiec	
General information	Semester	winter
	ECTS credits	4
	Lectures total	15 hrs
	Classes	15 hrs
Objective and general description	<p>The aim of this study is to show main differences between farming systems: conventional, integrated and organic. It means differences in the role of crop rotations, soil cultivation, fertilization and plant protection in these systems. As for soil cultivation and crop rotation the study will acquaint students with action and influence on soil of farm machinery used in the traditional and modified soil cultivation systems: plough, non-plough and no-till.</p> <p>After completing this course student will be able to name differences between farming systems, choose proper crop-plants to crop rotation, according to their soil and climatic requirements.</p> <p><u>Lectures</u></p> <ol style="list-style-type: none"> 1. Main differences between farming systems 2. Main differences between farming systems 3. The role of crop rotation in different systems 4. The role of crop rotation in different systems 5. Cultivation of soil depending on system (plough, non-plough, no-till) 6. Cultivation of soil depending on system (plough, non-plough, no-till) 7. The influence of cultivation system on the soil properties 8. The usage of fertilizers (mineral, organic and natural) 9. The influence of fertilizers on environment 10. Significance of livestock 11. Control of pests in different systems 12. Control of pests in different systems 13. The influence of each farming system on environment 14. The influence of each farming system on environment 15. Profitability of different farming systems <p><u>Classes</u></p> <p>1-15. Each student will be making a project of crop rotation for a chosen farming system connected with technological card of soil cultivation, fertilization and control of pathogens.</p>	
Assessment method	Lectures: Oral exam Classes: Project	
References	<ol style="list-style-type: none"> 1. Handbook of Precision Agriculture. Principles and Applications. 2006. A. Srinivasan (ed.). Food Products Press 2. B. Šarapatka, J. Urban et al. 2009. Organic Agriculture. IAEI, 	

Prague.

3.Sustainable farming systems in upland areas. <http://www.apo-tokyo.org/publications/files/agr-02-sfs.pdf>