

Course name:

FARMING SYSTEMS

ECTS	3
Course status	obligatory
Course final assesement/evaluation of outcomes	exam
Prerequisites	n.a.

Main field of study:

AGRICULTURE

Profile of study	General-academic
The code of studies (education level)	SI bachelor
Semester of studies	winter
Language of instruction	English

Course offered by:

Name of faculty offering the course	Faculty of Agriculture and Economics
Name of department offering the course	Department of Agroecology and Crop Production
Course coordinator	Agnieszka Synowiec, Maciej Chowaniak

Learning outcomes of the course:

Symbol of outcome	Description of learning outcome	Reference to	
		main field of study outcomes	discipline#

KNOWLEDGE – student knows and/or understands:

FS_W1	knows the basic principles, methods, techniques, technologies, tools and materials to use the potential of nature in the production of high-quality crop materials	RO1_W13	RR
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SKILLS – student is able to:

FS_U1	designs and evaluates crop production systems and technologies	RO1_U21	RR
FS_U2	evaluates and plans to use various tools, machines, methods and technologies in crop production	RO1_U24	RR
	compares farming systems and technologies of agricultural production in terms of their economic efficiency, impact on the environment and food quality	RO1_U25	RR

SOCIAL COMPETENCE- student is ready to:

FS_K1	solves tasks on his own or in a team, fulfilling designated functions	RO1_K02	RR
FS_K2	is aware of the environmental burdens resulting from agricultural production	RO1_K06	RR

Teaching contents:

Lectures		15	hours
Topics of the	Farming systems - definitions, classification in the EU and outside, roles in modern agriculture Conventional farming Sustainable agriculture principles, IPM Sustainable livestock raising		

lectures	Organic farming Agroforestry and biodiversity farming Precision farming Soil tillage systems
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Accomplished learning outcomes	<i>FS-W1, FS_U1, FS_U2, FS_K1, FS_K2</i>
Verification methods, rules and criteria of outcome assessment	<i>final essay (60%)</i>

Classes	15	hours
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Topics of the classes	Classes are realised as individual projects:
	Individual project of farm in a chosen farming system: crop rotation, plant protection, fertilization.
	Calculating the residues of pesticides in the crop-yield - MRL according to the European Commission
	Calculating the greenhouse gases (GHG) emission for a chosen cropping technology.

Accomplished learning outcomes	<i>FS-W1, FS_U1, FS_U2, FS_K1, FS_K2</i>
Verification methods, rules and criteria of outcome assessment	<i>project (in 40%)</i>

Seminars	...	hours
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Topics of the seminars	
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Accomplished learning outcomes	<i>symbol of learning outcomes of the seminars</i>
Verification methods, rules and criteria of outcome assessment	<i>together with participation in the final assessment (in %)</i>

References:

Basic	<i>Darnhofer I., Gibbon D., Dedieu B. (eds) Farming Systems Research into the 21st Century: The New Dynamic. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-4503-2_1</i>
Supplementary	<i>research papers provided by the teachers during course</i>

Structure of learning outcomes:

Discipline: # RR	3	ECTS**
Discipline: # (provide appropriate symbol - if the course relates to more than one academic discipline)	...	ECTS**

Structure of student activities:

Contact hours	34	hours	1,4	ECTS**
including:	lectures	15*	hours	
	classes and seminars	15*	hours	
	consultations	2	hours	
	participation in research	...	hours	
	mandatory traineeships	...	hours	
	participation in examinations	2	hours	
e-learning	...	hours		ECTS**

student own work	40	hours	1,6	ECTS**
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Syllabus valid from the academic year 2021/2022

* **where 10 hours of classes = 1 ECTC (in case of 15 h → 2 ECTS)**

** stated with an accuracy to 0.1 ECTS, where 1 ECTS = 25 - 30 hours of classes

academic discipline code: RR - agriculture and horticulture