

Course name:**INSECTS, SPIDERS AND OTHER INVERTEBRATES AND THEIR IMPACT ON HUMANS**

ECTS	3
Course status	complementary
Course final assessment/evaluation of outcomes	completion with grade
Prerequisites	no prerequisites

Main field of study:

field of study name (capital letters) **AGRICULTURE**

Profile of study	General-academic
The code of studies (education level)	SI/SM (bachelor / master)
Semester of studies	spring
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 Microbiology and Biomonitoring
Course coordinator	prof. Dariusz Ropek

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:			
ISI.SM_W01	the importance of invertebrates in the environment and economy	RO2_W07	RR
SKILLS – student is able to			
ISI.SM_U01 ISI.SM_U02	identify economically important groups of invertebrates and assess their importance in the environment determine the importance of individual groups of invertebrates for humans	RO2_U13 RO2_U16	RR
SOCIAL COMPETENCE- student is ready to:			
ISI.SM_K01	to constantly expand knowledge	RO2_K01	RR

Teaching contents:

Lectures		15	hours
Topics of lectures	Invertebrates - systematics and characteristics Arachnids - importance in the environment and in people's lives Insects - systematics and general characteristics Insects as a threat to humans Insects important for agriculture and economy Social insects The use of invertebrates as a source of protein and in waste disposal The use of insects in criminology Myriapods and crustaceans - importance in the environment and in human life Molluscs - importance in the environment and in people's lives. Snails - enemies or allies		

	Protection of invertebrates Methods of observation, catching and conservation of invertebrates		
Accomplished learning outcomes	<i>ISI.SM_W01</i>		
Verification methods, rules and criteria of outcome assessment	Lectures: written exam – test and problem questions. Share in final grade 60%		
Classes		10	hours
Topics of classes	Arachnids - biology and determination Insects - biology and determination Myriapods and crustaceans - biology and determination Molluscs - biology and determination		
Accomplished learning outcomes	<i>DSP.SI_U01, DSP.SI_U02, DSP.SI_K01</i>		
Verification methods, rules and criteria of outcome assessment	Attendance at at least 2 classes. Share in final grade 30%		
Field trip		5	hours
Topics of field trip	Observation of selected groups of invertebrates in their natural environment		
Accomplished learning outcomes	<i>ISI.SM_U01, ISI.SM_U02, ISI.SM_K01</i>		
Verification methods, rules and criteria of outcome assessment	Assessment of the field trip report. Share in final grade 10%		

References:

Basic	<i>Public Health Significance of Urban Pests Public Health Significance of Urban Pests. Xavier Bonnefoy Helge Kampen Kevin Sweeney. World Health Organization Urban pests and their public health significance. Chartered Institute of Environmental Health Chadwick Court 15 Hatfields London SE1 8DJ</i>
Supplementary	<i>Ropek D., Kacorzyk P. 2011. Biodiversity of soil fauna depending on vegetal cover and fertilization. Ecol. Chem. Eng. A, 18(8), 1117-1122.</i>

Structure of learning

outcomes:

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

Structure of student activities:

Contact hours	38	hours	1,5	ECTS*
including:	lectures	hours	hours	
	Classes and seminars	hours	hours	
	consultations	hours	hours	
	participation in research	hours	hours	
	mandatory traineeships	hours	hours	
	Participation in examinations	hours	hours	
e-learning	...	hours		

Students own work	37	hours	1,5	ECTS*
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Syllabus valid from the academic year 2024/2025

* 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: RZ - animal science and fishery, PB - biological sciences, etc.