DESCRIPTION OF THE SAFE_04 MODULE IMPLEMENTED AS PART OF THE INTENSIVE FORM OF EDUCATION (IFoE)

Module Name	Hazards when using pesticides			
Language of Instruction	english			
Module Purpose	Learn about the aspects and hazards associated with modern plant protection, pesticide use, safe treatment, record-keeping, and the disposal of plant protection product packaging.			
Module Content	A general overview of the latest plant protection methods, with particular emphasis on integrated methods. The impact of plant protection equipment on treatment effectiveness and increased application options for chemical plant protection products. New technologies for applying plant protection products in agricultural crops in accordance with the requirements of integrated pest management and environmental safety. Factors influencing the effectiveness of plant protection in field and orchard crops. Mastering the basics of field and orchard sprayer calibration. Using interactive tools to select appropriate spraying parameters depending on external conditions.			
Description of learning outcomes	Effect Symbol	Effect Name Methods	Verification and Documentation	Reference to Directional Effect Set
	KNOWLEDGE (graduate knows and understands)			
	W1	Provides knowledge related to anthropogenic transformation of the natural environment through plant protection and the impact of these processes on biodiversity conservation.	Graded assessment, written test, assessment report, archiving of assessment papers.	SAFE_W02
	W2	Understands the principles of proper work organization and safe performance of plant protection treatments and work with toxic materials.	Graded assessment, written test, assessment report, archiving of assessment papers.	SAFE_W03
	SKILLS (graduate can)			

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	U1	Has the ability to recognize hazards arising from the implementation of plant protection tasks in crop production.	Graded assessment, written test, assessment report, archiving of final assignments.	SAFE_U01
	U2	Assesses the advantages and disadvantages of applied plant protection solutions of varying complexity.	Graded assessment, written test, assessment report, archiving of final assignments.	SAFE_U05
	SOCIAL COMPETENCES (graduate is ready to)			
	K1	Is able to predict and assess the most important agricultural and non-agricultural impacts of plant protection activities and adheres to basic ethical principles in food production.	Participation in speeches and discussions	SAFE_K01
Module crediting method	Tests with a grade			
ECTS credit balance (total, developing practical skills, from classes conducted using distance learning methods and techniques)	Number of contact hours/ECTS points		Number of non-contact hours/ECTS points	
	Lectures (hours 1 ECTS points 0.04) Classes (hours 1 ECTS points 0.04) Consultations (hours 0.5 ECTS points 0.02) Assessment (hours 0.5 ECTS points 0.02)		Reading literature (hours 1 ECTS points 0.04) Preparing for credit (hours 1 ECTS points 0.04)	
	Total contact hours 3 hr. 0,12 pt. ECTS		**Total non-contact hours 2 hr. 0,08 pt. ECTS**	

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Staffing	dr hab. inż. Stanisław Parafiniuk prof. uczelni
Information on the infrastructure ensuring the implementation of learning outcomes	The lecture hall is equipped with a multimedia projector for lecture presentations. The laboratory is equipped with equipment for assessing the performance of individual sprayer work units, which influences the quality of treatments performed. The equipment allows students to adjust the sprayer operating parameters. The lecture hall and laboratory are accessible to people with disabilities.
Planned teaching methods	Lecture in the form of a multimedia presentation, exercises in the unit's laboratory using available equipment.
Recommended reading list	Borecki Z., Science of Plant Diseases. PWRiL Warsaw, 2001. Boczek J., Science of Crop Pests. SGGW Warsaw, 2001. Plant Protection Recommendations for the Control of Diseases, Pests, and Weeds of Crop Plants for 2019-2020, vol. I-IV. IOR Poznań Publishing House. Hołownicki R. Plant Spraying Technique. Plantpress 2014. Legutowska H. Plant Protection SGGW Warsaw 2017. Mazik M. Plant Diseases and Pests: Protection and Prevention. Dragon Publishing House 2016.

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