

COURSE LAYOUT

1. GENERAL

SCHOOL	PLANT SCIENCES		
DEPARTMENT	Crop Science		
STUDY LEVEL	Undergraduate		
COURSE CODE	2955	SEMESTER	8th
COURSE TITLE	Pesticide Science		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	ECTS
Theory: Lectures,		3	3
Laboratory and practice		2	2
<i>Total</i>		5	5
COURSE TYPE	Scientific		
PREREQUISITES	-		
LANGUAGE:	Greek		
IS THE COURSE OFFERED For ERASMUS STUDENTS?	yes		
COURSE WEB PAGE			

2. LEARNING OUTCOMES

Learning Outcomes
<p>After the successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Judge the benefits and risks arising from the use of plant protection products (PPP) and biocides. • Describe the different categories of PPP based on the target organism and their biochemical mode of action • Recognize and evaluate the various formulation types of PPP and biocides. • Identify and understand the information given on the label of PPP & biocides • Know the Personal Protective Equipment and understand the necessity of their use
General Competenses
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using necessary technologies • Autonomus work • Promotion of free, creative and inductive thinking

3. COURSE CONTENT

<ul style="list-style-type: none"> • Pest management during cultivation • Chemicals for crop protection. Historical review. Chemistry and classification of the active ingredients of pesticides. • Mode of action of pesticides, The basis of selective toxicity • Pesticide formulations. Nomenclature, ingredients, formulation types. • Pesticide application. The choice of formulation, application and safety • Problems in the use of pesticides. Measures to minimize the adverse effects of pesticide application. • Degradation of pesticides. Non-biological and microbial degradation. Pesticide soil interactions. • Elements of pesticide legislation.

4. TEACHING and LEARNING METHODS - Evaluation

TEACHING METHOD	In class	
USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES	PowerPoint presentations Communication via e-mails, e-class, on-line databasis	
TEACHING ORGANISATION	Activity	Work Load
	Lectures	40
	Laboratory work+ practice	13
	Total contact hours and training (About 25 hours of study per ECTS)	
STUDENTS EVALUATION	<u>I. Theory</u> Final written Exam, of increasing difficulty, which may include: -Questions to develop a topic and Multiple-choice test -Exercise solving of graded difficulty. <u>II. Laboratory</u> Final written Exam, short assays	

5. SUGGESTED BIBLIOGRAPHY

- Online notes for laboratory exercises and lecture presentations.
 - B. Ζιώγας και Α. Μαρκόγλου, *Γεωργική Φαρμακολογία, 2010*
 - Ε. Παπαδοπούλου-Μουρκίδου, *Γεωργικά Φάρμακα, Εκδόσεις Μέθεξις, Θεσσαλονίκη, 2008*
- relevant scientific journals:**
- JOURNAL OF PEST SCIENCE
 - PEST MANAGEMENT SCIENCE
 - PESTICIDE BIOCHEMISTRY AND PHYSIOLOGY

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