

Course Syllabus

Title (Greek)	Title (English)	Main instructor	Co-lecturers
Διαχείριση εισροών με μεθόδους γεωργίας ακριβείας	Precision Inputs Management	Fountas S.	Derkas N. Ehaliotis C.
Course			
<p>This course will present the fundamental principles of precision agriculture technologies and practices in crop production. It will present and analyse the crop requirements in terms of all major inputs, mainly irrigation, nutrients, crop protection products, as well as precision tillage and selective harvesting. This course aims to analyse the technological requirements for precision inputs management, as well as presenting practical applications in the field.</p>			
Learning objectives			
<p>This course will be focused on scientific achievement, acquisition of knowledge and enhancement of comprehension of information regarding the technological requirement and the needed practices for precision inputs management. MSc students will practice knowledge-based critical thinking and solution offering about precision farming for crop production.</p> <p>The MSc degree students completing this course will be able to:</p> <ul style="list-style-type: none"> - Learn the principals of precision agriculture practices - Identify the technologies needed to apply precision agriculture practices - Become familiar with the use of precision farming in all crop production practices - Learn about practical applications of precision farming - Familiarise with the use of technologies for applying precision agriculture 			

Week	Course Contents
1 ST	Introduction to precision agriculture (Fountas)
2 ND	Fundamental technologies for precision agriculture (Fountas)
3 RD	Precision agriculture yield mapping for open fields (Fountas)
4 TH	Precision agriculture yield mapping for vineyards and orchards (Fountas)
5 TH	Precision irrigation technologies and practices (Derkas)
6 TH	Precision fertilization technologies and practices (Ehaliotis)
7 TH	Precision tillage equipment and practices (Fountas)
8 TH	Precision crop protection techniques (Fountas)
9 TH	Precision spraying equipment and practices (Fountas)
10 TH	Precision harvesting for vineyards and fruit crops (Fountas)
11 TH	Precision harvesting for field crops (Fountas)
12 TH	Practical applications of precision farming for field crops (Fountas)
13 TH	Practical applications of precision farming for fruit and vines (Fountas)

Assignments –

1. Technologies for precision irrigation and fertilization
2. Technologies and applications for precision spraying
3. Technologies and applications for selective harvesting

Exams, marking and student assessment

Assignments (four): 100%, Written exams: 0%

Proposed reference material

- Scientific papers given by the lecturers