

28959 - Integrated production and agroecology

Syllabus Information

Academic Year: 2020/21

Subject: 28959 - Integrated production and agroecology

Faculty / School: 201 - Escuela Politécnica Superior

Degree: 583 - Degree in Rural and Agri-Food Engineering
437 - Degree in Rural and Agri-Food Engineering

ECTS: 5.0

Year: 4

Semester: Second semester

Subject Type: Optional

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The course will address the following topics:

- Lectures in the classroom.
- Practical sessions in lab.
- Tutorial sessions.
- Field visits.

4.2.Learning tasks

The course includes the following learning tasks:

- I. Crop ecology. Theoretical and practical lessons
- II. Legislation and standards for integrated production and agroecology Theoretical and practical lessons
- III. Resource management Theoretical and practical lessons. Field visit

4.3.Syllabus

The course will address the following topics:

Theory Programme

- I. Crop ecology
 - a. Introduction: Sustainability of agricultural systems
 - b. Community concepts
- II. Legislation and standards for integrated production and agroecology
 - a. Integrated production
 - b. Ecological agriculture
- III. Resource management
 - a. Soil management
 - b. Water management
 - c. Vegetation cover management
 - d. Integrated crop protection

Practical programme

- I. Characterisation of the initial situation: Surveys
 - II. Detecting problematic situations
 - III. Handling alternatives
- Field visit

4.4.Course planning and calendar

Week	1	2	3	4	5	6	7	SS	8	9	10	11	12	13	14	15
Session	I-a	I-b	II a	II-b	III-a	III-b	III-b		III-c	III-d	III-d					
Hours	2	2	2	2	2	2	2		2	2	2					
Practical sessions	I	I		II	II	II	III		III	III	III	III	III	III	III	
Hours	2	2		2	2	2	2		2	2	2	2	2	2	2	
Field visit			V-1													
Hours			4													
Evaluation																3
Personal work	5	5	5	3	3	3	4	6	4	4	4	4	4	4	6	8
TOTAL	9	9	11	7	7	7	8	6	8	8	8	6	6	6	8	11

4.5.Bibliography and recommended resources

- BB** Agroecología y desarrollo : aproximación a los fundamentos agroecológicos para la gestión sustentable de agrosistemas mediterráneos / Juana Labrador Moreno, Miguel Ángel Altieri (coordinadores) . Cáceres : Universidad de Extremadura ; Madrid : Mundi- Prensa, 2001
- BB** Fernández Ales, Rocío. Ecología para la agricultura / Rocío Fernández Alés, María José Leiva Morales . Madrid [etc.] : Mundi-Prensa, 2003
- BB** Gliessman, Stephen R.. Agroecología : procesos ecológicos en agricultura sostenible / Stephen R. Gliessman . Turrialba : CATIE , 2002
- BB** Loomis, R.S.. Ecología de cultivos : Productividad y manejo en sistemas agrarios / R.S. Loomis, D.J. Connor . Madrid : Mundi-Prensa, 2002
- BB** Powers, Laura E.. Principios ecológicos en agricultura / Laura E. Powers, Robert McSorley ; traducido por Alfredo Pozuelo. . Madrid : Paraninfo, Thomson Learning, 2001
- BC** Agricultura sostenible / coordinadores, Rafael M. Jiménez Díaz y Jaime Lamo de Espinosa . Madrid : Mundi-Prensa : Agrofuturo : Life, 1998
- BC** Agroecology / [edited by] C. Ronald Carroll, John H. Vandermeer, Peter Rosset . New York ; London : McGraw-Hill, c1990

- BC** Carrero, José María. Lucha integrada contra las plagas agrícolas y forestales / José María Carrero . Madrid : Mundi-Prensa, 1996
- BC** Dajoz, Roger. Tratado de ecología / Roger Dajoz ; traducción y revisión técnica María José Leiva Morales . 2ª ed., rev. y amp. Madrid : Mundi-Prensa, 2002
- BC** La práctica de la agricultura y ganadería ecológicas / [autores: Itziar Aguirre Jiménez... [et al.]] . 2ª ed. Sevilla : Comité Andaluz de Agricultura Ecológica, 2002
- BC** Margalef, Ramón. Ecología / Ramón Margalef . 10a reimp. Barcelona : Omega, cop. 2005

The updated recommended bibliography can be consulted in:

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=28959>