

## 28959 - Integrated production and agroecology

### Syllabus Information

**Academic Year:** 2019/20

**Subject:** 28959 - Integrated production and agroecology

**Faculty / School:** 201 - Escuela Politécnica Superior

**Degree:** 437 - Degree in Rural and Agri-Food Engineering  
583 - 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://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=28959&Identificador=14236>