

28959 - Integrated production and agroecology

Información del Plan Docente

Academic Year	2016/17
Academic center	201 - Escuela Politécnica Superior
Degree	437 - Degree in Rural and Agri-Food Engineering
ECTS	5.0
Course	4
Period	Second semester
Subject Type	Optional
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

Theoretical lessons in classroom.

Practical sessions in lab.

Tutorial sessions.

28959 - Integrated production and agroecology

Field visits.

5.2.Learning activities

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

5.3.Program

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

28959 - Integrated production and agroecology

I. Characterisation of the initial situation: Surveys

II. Detecting problematic situations

III. Handling alternatives

Field visit

5.4. Planning and scheduling

Week	1	2	3	4	5	6	7	SS	8	9	10	11	12	13	14	15
Sessions	I-a	I-b	II-a	II-b	III-a	III-b	III-b		III-c	III-c	III-c					
Hours	2	2	2	2	2	2	2		2	2	2					
Practical sessions	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	
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

5.5. Bibliography and recommended resources

Basic references

- Fernández Ales, Rocío. 2003. Ecología para la agricultura. Madrid. Mundi-Prensa, 2003
- Gliessman, Stephen R. 2002. Agroecología : procesos ecológicos en agricultura sostenible. Turrialba : CATIE.

28959 - Integrated production and agroecology

- Labrador Moreno, J y M.A. Altieri (coord..). 2001. Agroecología y desarrollo: aproximación a los fundamentos agroecológicos para la gestión sustentable de agrosistemas mediterráneos. Cáceres : Universidad de Extremadura. Madrid : Mundi- Prensa, 2001.
- Loomis, R.S.and D.J. Connor. 2002. Ecología de cultivos : Productividad y manejo en sistemas agrarios. Madrid. Mundi-Prensa.
- Powers, Laura E.. Principios ecológicos en agricultura / Laura E. Powers, Robert McSorley ; traducido por Alfredo Pozuelo. . Madrid : Paraninfo, Thomson Learning, 2001.

Complementary references

- Aguirre Jiménez, I et al. 2002. La práctica de la agricultura y ganadería ecológicas. 2ª ed. Sevilla. Comité Andaluz de Agricultura Ecológica.
- Carrero, José María. 1996. Lucha integrada contra las plagas agrícolas y forestales. Madrid. Mundi-Prensa.
- Dajoz, Roger. 2002. Tratado de ecología. Traducción y revisión técnica María José Leiva Morales . 2ª ed., rev. y amp. Madrid : Mundi-Prensa.
- Jiménez Díaz, R.M. y J. Lamo de Espinosa. 1998. Agricultura sostenible. Madrid. Mundi-Prensa. Agrofuturo. Life.
- Margalef, Ramón. 2005. Ecología. 10a reimp. Barcelona.Omega.
- Ronald Carroll, C.; J. H. Vandermeer and P. Rosset. 1990. Agroecology / [edited by]. New York. London. McGraw-Hill.