

Información del Plan Docente

Academic Year	2016/17
Academic center	201 - Escuela Politécnica Superior
Degree	437 - Degree in Rural and Agri-Food Engineering
ECTS	6.0
Course	3
Period	Second semester
Subject Type	Compulsory
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 and greenhouse.

Tutorial sessions.

Field visits.

5.2.Learning activities

Theoretical program

Module I - General aspects of herbaceous crop systems

I.1 Introduction and statistical data

I.2. Cereals - morphology

I.3 Farming techniques in herbaceous crops

I.4 Fertilization in herbaceous crops

I.5 Use of certified seed

I.6 Main pests in herbaceous crops

I.7 Quality indexes in cereals

Module II - Specific aspects of each crop (15 class hours)

II.8 Cereals - soft and durum wheat

II.9 Cereals - barley

II.10 Some other winter cereals - oats, rye and triticale

II.11 Cereals - maize

II.12 Cereals - rice

II.13 Cereals - sorghum

II.14 Grain legumes

II.15 Fodder legumes - alfalfa

II.16 Fodder grasses

II.17 Sunflower

II.18 Oilseed rape

Content of practical sessions

Module I - General aspects of herbaceous crop systems. Theoretical and practical lessons

Module II - Specific aspects of each crop. Theoretical and practical lessons. Field visit

5.3.Program

Theoretical program

Module I - General aspects of herbaceous crop systems

I.1 Introduction and statistical data

I.2. Cereals - morphology

I.3 Farming techniques in herbaceous crops

I.4 Fertilization in herbaceous crops

I.5 Use of certified seed

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Module I - General aspects of herbaceous crop systems

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II.17 Sunflower

II.18 Oilseed rape

Field visits

5.4. Planning and scheduling

week1	2	3	4	5	6	7	SS	8	9	10	11	12	13	14	15
Theoretical sessions	II.11 y 12	II.12	II.13	II.14	II.15 y 16	II.16 y 17		II.8	II.9 y 10	II.11 y 12	II.12 y 13	II.13 y 14	II.14 y 15	II.15 y 16	II.16 y 17
Hous	2	2	2	2	2	2		2	2	2	2	2	2	2	2
Practical sessions	II.8 y 10	II.9 y 11	II.14 y 15	II.15 y 16	II.16 y 17										
Hous	2	2	2	2				2	2	2	2	2			
Field visit						Salida 1							Salida 2		
Hous	5					5							5		
Evaluation													1	2	
Personal work	5	5	5	5	4	5	8	5	5	5	5	5	5	7	8

5.5. Bibliography and recommended resources

Basic references

28926 - Herbaceous crops

Guerrero García, Andrés. Cultivos herbáceos extensivos. 6^a ed. rev. y ampl. Madrid : Mundi-Prensa, 1999

López Bellido, Luis. Cultivos herbáceos. Vol. I, Cereales. Madrid : Mundi-Prensa, 1991

López Bellido, Luis. Cultivos industriales. Madrid [etc.] : Mundi-Prensa, 2003

Complementary references

Franco Jubete, F y Ramos Monreal. A (coordinadores). El cultivo de las leguminosas de grano en Castilla y León. Valladolid : Consejería de Agricultura y Ganadería, D.L.1996

Molina Cano, José Luis. La cebada. Madrid : Ministerio de Agricultura, Pesca y Alimentación, Servicio de Extensión Agraria : Mundi-Prensa, 1989

Muslera Pardo, Enrique de. Praderas y forrajes : producción y aprovechamiento. 2a. ed. rev. y ampl. Madrid : Mundi-Prensa, 1991