

COURSE: **SUSTAINABLE CROPPING SYSTEMS**

ACADEMIC YEAR: 2016-2017

TYPE OF EDUCATIONAL ACTIVITY: Affine

TEACHER: Stella LOVELLI

e-mail: stella.lovelli@unibas.it

website: www2.unibas.it/lovelli

phone: 0971 205384

mobile (optional): 3293606259

Language: Italian

ECTS: 6 (5 CFU of lessons
and 1 CFU of practice)

n. of hours: 40 (lessons) 16
(practice)

Campus: Potenza
School: SAFE
Program:

Semester: II semester

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Knowledge: The course has as its objective the acquisition of theoretical and practical knowledge for the crop system, knowledge of the elements and functioning of agro-ecosystems, including skills for the eco-sustainable management of cropping systems. Knowledge and understanding are achieved through participation in lectures, practical exercises, guided self-study and self-study.

Ability: At the end of the course students should be able to discuss, in general, the effects of innovative crop management on crop production.

PRE-REQUIREMENTS

You must have acquired the following knowledge provided by the courses of "Agronomy", "Field crops" and "Horticulture".

SYLLABUS

CFU 1- (8 hours of lessons)

The training objective is the acquisition of theoretical and practical knowledge for the crop system with particular reference to the following topics:

Evolution of farming concept. The cropping system: definition and constituent elements. conventional and alternative cropping systems. Conservation agriculture. The concept of sustainability in agricultural production processes.

CFU 2 - (8 hours of lessons)

The training objective is the acquisition of theoretical and practical knowledge with particular reference to the following topics: the choice of cropping system: analysis and evaluation techniques. theoretical and practical aspects in the use of indicators. Possible applications of the indicators in agro-environmental issues.

CFU 3 - (8 hours of lessons)

The training objective is the acquisition of theoretical and practical knowledge for precision farming and soil mapping systems.

CFU 4 - (8 hours of lessons)

The training objective is agronomic dimensioning of crop systems that may include solutions to management excess of water with particular reference to water logging and its effects; drainage, erosion and runoff control of fast flows, Land accommodation; Protective measures and recovery of soils subject to erosion.

CFU 5 - (8 hours of lessons)

The goal is the acquisition of theoretical and practical knowledge for mineral and organic fertilization. Fertilization plans.

CFU 6 - (16 hours of laboratory tutorials)

The training objective is to acquire data and information for the crop management through active participation in exercises in the computer lab (use of irrigation scheduling software) and through numerical exercises.

TEACHING METHODS

The course includes 56 hours of teaching between Lessons and Laboratory tutorials. In particular it is provided 40 hours of lectures and 16 hours of guided exercises in the computer lab. At the end of the guided exercises, the students will have free access to the lab for further individual exercises.

EVALUATION METHODS

Learning will be verified during an oral examination at the end of the course. They will be drawn three questions, one of which will cover the knowledge and skills learned during the exercises.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Giardini L., AGRONOMIA GENERALE, AMBIENTALE ED AZIENDALE, Patron Editore, 1992

Baldoni R., COLTIVAZIONI ERBACEE, Patron Editore, 1989

Teaching materials available on the website of the teacher : www2.unibas.it/loveli/didattica

INTERACTION WITH STUDENTS

At the beginning of the course, after describing the objectives, program and methods of verification, the teacher provides students educational materials (giving a password to be able to download the course materials from the web site: www2.unibas.it/loveli). Simultaneously, it collects a list of students who intend to take the course, together with name, serial number and email.

Office hours: Monday through Thursday from 10.00 to 13.00 at the study of the teacher (SAFE). In addition to weekly reception, the teacher is available at all times for a contact with the students, through their e-mail.

EXAMINATION SESSIONS (FORECAST)¹

18/01/2017, 15/02/2017, 15/03/2017, 19/04/2017, 17/05/2017, 21/06/2017, 19/07/2017, 27/09/2017, 18/10/2017, 15/11/2017, 13/12/2017

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

Examination committee: Lovelli Stella, Rivelli Anna Rita, Amato Mariana, Perniola Michele
