



ACADEMIC YEAR: 2016-2017

COURSE: Agronomy and mountain crop systems

TYPE OF EDUCATIONAL ACTIVITY: Characterizing

TEACHER: Prof. Mariana Amato

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website:

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mobile (optional): +393293606261

Language: Italian

ECTS: 6 (5 lessons + 1
tutorials/practice)

n. of hours: 56 (40 lessons +
16 tutorials/practice)

Campus: Potenza/Matera
Dept./School: Scuola di Scienze
Agrarie, Forestali, Alimentari ed
Ambientali (SAFE)
Program:

Semester: II

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The course aims to provide the basic knowledge about mountain agro-pasture systems. It targets the environment, agricultural management and the productive cycle of the main crops, and provides elements for understanding the relations between agricultural systems, management, environmental impact and the quality of products, developing criteria and methods for planning appropriate management strategies oriented to cropping system sustainability and productive/qualitative goals. Learning outcomes also include being able to use tools and instruments for the evaluation of soils and products, and for identifying relevant elements of the productive cycle of crops and their interactions and for planning the use of management techniques.

PRE-REQUIREMENTS

SYLLABUS

The course will address the main elements of the mountain environment relevant to crop and forage growth, production and ecosystem services. Management techniques will be introduced. The productive cycle of the main herbaceous crops will be addressed. Contents include the description of relevant soil and environment properties, main agricultural management techniques, the effect of agricultural management on yield and quality, and the main problems and issues related to sustainability. Criteria for identifying vegetative and reproductive parts of the main herbaceous crops will be addressed. Instrumentation and tools for decision support and evaluation of management techniques will be introduced to students.

Main subjects will be:

The environment (8 h lesson + 8 h practice)

Management techniques (8 h lesson + 2 h practice)

Mountain agriculture and forage systems (4 h lesson + 2 h practice)

Introduction to model crops (10 h lesson + 2 h practice)

Forage systems (8 h lesson + 2 h practice)

TEACHING METHODS

EVALUATION METHODS

Written exams are held during the course: one mid-term exam and one final exam. Each written exam consists of 4 open-answer questions + 3 questions on practical session, regarding the identification of plant species from seeds or other relevant parts, or the calculation/measurement of simple quality parameters. The written exam lasts 50 minutes. The minimum score for passing is 18/30. The final grade is the average of grades from the two written

exams. Students who don't wish to take the written exams or who don't pass them will take the oral exam.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Educational materials are textbooks and materials provided by the teacher to students who provide their e-mail at the beginning of the course.

Textbooks:

Giardini L., Agronomia generale, ambientale e aziendale, 4a edizione, Patron Ed. Bologna, 2000.

Landi, Agronomia e ambiente, Edagricole, Bologna, 1999

Coltivazioni erbacee vol. I - Cereali e proteaginose di Baldoni / Giardini Patron editore

Coltivazioni erbacee vol. III - Foraggiere e tappeti erbosi di R. Baldoni e L. Giardini Patron editore

For consultation:

The state of food insecurity, 2008 (www.fao.org) FAO 2008. Climate Change: implications for food safety

(www.fao.org) MIPAAF. Piano Cerealicolo Nazionale INEA: Rapporto sull'agricoltura italiana (www.ismea.it)

Fonti statistiche: www.fao.org/corp/statistics/en/ www.inea.it/pubbl/itaco.cfm www.USDA.org

INTERACTION WITH STUDENTS

At the beginning of the course teaching methods, objectives, contents and dates of exams are presented. A list of students who wish to attend the course, attend laboratory session and receive teaching materials is made, and their e-mail are collected.

Educational materials are sent to students who have provided their e-mails before or right after each lesson.

Students may meet the teacher at her office preferably on Mondays 9.00 to 11.00 and Wednesday 9.30 to 11.30 or at other times by fixing an appointment through e-mail or phone call.

EXAMINATION SESSIONS (TENTATIVE)¹

21/09/2016, 12/10/2016, 16/11/2016, 14/12/2016, 18/01/2017, 15/02/2017, 15/03/2017, 12/04/2017, 17/05/2017, 21/06/2017, 12/07/2017

EVALUATION BOARD

Prof. Mariana AMATO

Prof. Antonio Sergio DE FRANCHI

Prof. Michele PERNIOLA

Prof. Stella LOVELLI

Dott. Giuseppe LANDI

SEMINARS BY EXTERNAL EXPERTS YES X NO

FURTHER INFORMATION

¹ Subject to possible changes: check the web site of the Teacher or the Department/School for updates.