

ACADEMIC YEAR: 2019/2020			
COURSE: Pasture management and herbaceous crops (AGR0144)			
TYPE OF EDUCATIONAL ACTIVITY: Characterizing			
TEACHER: Antonio Sergio De Franchi			
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phone: 0971 205284		mobile: 329 3606247	
Language: Italian			
ECTS: 6+1	n. of hours: 40 + 16	Campus: Potenza School of Agriculture, Forestry, Food and Environmental sciences Program: Forestry and Environmental sciences (LM)	Year: 2 Semester: 2 st

#### **EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES**

The course examines the herbaceous forage crops of possible cultivation and management in natural environments, and arable land in the mountain. He studies the selection of the species and varieties, cultivation techniques suitable for production use and soil conservation and environmental protection. The choice of crops, limited by soil and climate factors, narrows to those that have a good chance of yield and positive economic results in the enhancement of the environment. The cultivation and agronomic management of different forage species (grasslands, meadowsgrazing meadows and pastures), of some cereals and grain legumes, in intensive cropping, extensive and natural systems.

The student will acquire skills relating to: the knowledge of the dynamics of cultural processes and interaction with the environment of the herbaceous species studied in Mediterranean environments; the ability to apply knowledge and understanding in order to design choices and agronomic cultivation and management of herbaceous formations in natural and artificial systems, and of cereals and leguminous crops; the ability to communicate and properly transmit the acquired knowledge and implement them with agro-cultural practices in the mountain, hill and lowland areas.

**Knowledge and understanding:** the student must demonstrate knowledge of the main cultivation techniques and must be able to understand and to address the sustainable management of crop, extensive and natural systems.

**Ability to apply knowledge and understanding:** The student must show ability to carry out the cultivation activities in a sustainable management approach in extensive and natural management systems.

**Judgment autonomy:** the student must be able to evaluate and choose the most suitable tools for setting up correct strategies to ensure the correct agronomic and sustainable management of crops in extensive and natural management systems.

**Communicative skills:** the student must have the ability to explain opportune management strategies of crop systems using paper or oral presentation in the field of crop systems management using the correct technical-scientific language.

**Learning skills:** The student must be able to update and enrich opportune knowledge through consultation of scientific publications and computer tools applied to herbaceous cultivation.

## PRE-REQUIREMENTS

Knowledge of the principles of Agronomy

#### **SYLLABUS**

ECTS 1: role of the herbaceous and forage crops in sustainable cropping systems with an environmental protection point of wiew. Aspects and climatic elements and their interaction with cultivated plants.

ECTS 2: possible herbaceous crops: wheat, barley, oats, rye, triticale, corn, rapeseed, sunflower: cultivation and agronomic management techniques in monophyte systems management.

ECTS 3,4,5: grasslands; meadows and meadows-pastures; pastures: agricultural techniques of cultivation and the main species grasses and legumes management in mono and polyphyte systems management.

ECTS 6: Exercises: case studies and management aspects of crops and herbaceous natural formations.



#### **TEACHING METHODS**

The course is organized as follows: lectures on all subjects of the course (40 hours);

Guided exercises in the open field (16 hours).

#### **EVALUATION METHODS**

Final oral examination during which we will evaluate the critical capacity of connection and comparison of the different aspects of the agronomic management of herbaceous crops grown in the Mediterranean agricultural environments.

#### TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Giardini L. e Baldoni R.: Coltivazioni erbacee. Ed. Patron

Baldoni R., Kokeni B., Lovato A.: Le piante foraggere. Ed. Reda

# INTERACTION WITH STUDENTS

Reception in days /times scheduled at the study of the teacher (SAFE)

Contacts e-mail and telephone.

# **EXAMINATION SESSIONS (FORECAST)**

Usually the first and the last Wednesday of each month except August.

### SEMINARS BY EXTERNAL EXPERTS YES

### **Examination committee:**

- Prof. Amato Mariana
- Prof. Gherbin Piergiogio
- Prof. Rivelli Anna Rita
- Dr. Landi Giuseppe