ACADEMIC YEAR: 2018-2019

COURSE: **Forest management and Forest inventories**

TYPE OF EDUCATIONAL ACTIVITY: Basic	
TEACHER: Agostino Maria Silvio Ferrara	
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Language: Italian	

ECTS: 12	n. of hours: 80 hours of lessons 32 hours of practice	Campus: Potenza School: SAFE Program: LM Forest and Environmental Sciences	Semester: I & II

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

- **Knowledge and understanding:** knowledge and understanding of the general principles related to the development and setting up Forest Management Plans and Forest inventories.
- **Applying knowledge and understanding**: the class covers the most fundamental decisions forest managers make in managing public and private forests, including stand and forest-level decisions.
- **Making judgements**: ability to select and apply the best procedure in planning and defining Forest Management plans.
- **Communication skills**: ability to organize in a logical way and to communicate, using an appropriate and correct language and graphical tools as well, the acquired knowledge.
- **Learning skills**: ability to collect and organize in a functional way the information coming from class lectures, suggested books, and literature data.

PREREQUIREMENTS

- LT (3-year degree): Forest and Environmental Science
- Forest mensuration, Silviculture

SYLLABUS

Lessons

First part (3 credits, Auxology). Concepts of stand and forest growth and development; production process of trees and whole stands; modeling of growth and yield processes.

Second part (6 credits, Forest management). Objectives, content, creating process, ratification process of Forest Management Plan; Frame planning, Management sets of stands, Frame management schedules; Special methods in forest management. Introduction to the sampling methods, log scaling and aerial photo interpretation. Measurements of timber stand growth, quantity and quality, and other forest products including range, wildlife and outdoor recreation.

Third part (3 credits, Forest inventory). Sampling Techniques for Forest Resource Inventory. Design and conduct a Forest inventory; software and tools for managing a Forest inventory; analysis of Regional/National Forest Inventories.

Practices

Case studies on the forest management of different Italian forests, from the Mediterranean to the sub-alpine belt.

TEACHING METHODS

80 hours of lessons delivered into the classroom and 32 hours of laboratory and field practices in different forest

environments. During practices students will be asked to put into practice theoretical knowledge. Students are expected to actively participate in all aspects of this course. Attendance is highly recommended.

EVALUATION METHODS
Written test, written report on the field practices and oral examination.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

G. Bovio, O. la Marca, 1996. Manuale di Assestamento. Editore: Bosco e Ambiente, Frontone (PS).
G. Bernetti, 1989. Assestamento Forestale. DREAM Italia Edizioni, Firenze.
O. la Marca, 1999. Elementi di Dendrometria. Patron Editore, Bologna.
P. CORONA Introduzione al rilevamento campionario delle risorse forestali, CLUSF Firenze 2000.

Exercises and training material: http://oldwww.unibas.it/utenti/ferrara/ferrara.htm or by e-mail

INTERACTIONS WITH STUDENTS
- in the office on appointment
- e-mail (every time)
- mobile, Skype and WhatsApp   (every time, if available)

EXAMINATION SESSIONS (Forecast)

The calendar is on the Student's reserved area:
 (Usually the third Wednesday of every month, except August)

EVALUATION BOARD

Agostino Ferrara; Marco Borghetti; Francesco Ripullone; Angelo Nolè

SEMINARS BY EXTERNAL EXPERTS   **YES**