



ACADEMIC YEAR: 2016-2017

COURSE: WOOD TECHNOLOGY AND FOREST LOGGING

TYPE OF EDUCATIONAL ACTIVITY: Characteristic

TEACHER: Prof. Nicola Moretti

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Language: Italian

**ECTS: (lessons and
tutorials 6 /practice
3): 9**

**n. of hours:
lessons and tutorials
48/practice 48**

**Campus: Potenza/Matera
Dept./School: SAFE
Program: as follows**

Semester: I & II

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The goal of the course is to give students the basic elements for the knowledge of the physical and mechanical properties of wood, forest products and logging. The main concepts regarding the rational use of wood will be given in order to adequately address the management and planning of forests, as well as the possibility of establishing for selected study cases, appropriate forest utilization choices and employed machines. The learning outcomes will be achieved through the study of proposed texts, conducting practical exercises in the laboratory, technical visits in specialized wood companies, writing individual and/or group papers for preparing the final exam.

PREREQUIREMENTS

Basic knowledge of silviculture, physics and dendrometry. Basic use of pc (Office package).

SYLLABUS

Wood-working and forest harvesting: technical choices, operational phases, equipment and machines.

Harvesting (climbing, debarking, sawing), concentration (depression, trawling with animals and with winches) skidding (for free trough with risine, tractors, tractors and winch, cable cars).

Safety and risk assessment in activities related to forest harvesting.

Microscopic wood identification and analysis. Macroscopic and microscopic wood recognition. Wood defects and wood moisture relationships.

Physical properties of wood: Weight Density - Directional shrinkages hardness. Mechanical properties of wood:

Compression extension bending. Modulus of Elasticity Main machines for woodworking-Aging and artificial drying.

Classification of the main wood-based panels. UNI -ISO.

Outdoor exercises in forestry. Technical visits in forest harvesting sites and in specialized wood-working companies.

Laboratory lessons.

TEACHING METHODS

Theoretical lessons, Laboratory tutorials, Technical visits

EVALUATION METHODS

Intermediate verifications, Written examination, Oral examination.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- G. Giordano- Tecnologia del legno. Tre volumi. UTET editore
 - Hippoliti G, Piegai F., 2000. La raccolta del legno. Compagnia delle foreste.
 - G.Giordano- Il legno-Vademecum per, falegnami, artigiani, forestali e collaudatori di legname.
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INTERACTIONS WITH STUDENTS

Deepening educational materials will be distributed in the classroom during the lessons and at the end of the course.

The teacher will be available to students every day via web (email: nicola.moretti@unibas.it) and personally on Tuesday, Wednesday and Thursday from 10 am to 12 am at UNIBAS in his room (SAFE Building 3B, 2° floor).

RECEPTION TIME STUDENT Professor: MORETTI NICOLA

Day	from	to	at
Monday			
Tuesday	10	12	office
Wednesday	10	12	office
Thursday	10	12	office
Friday			

EXAMINATION SESSIONS (Forecast)

Exam schedule: 2016-2017

28/07/2016, 28/09/2016, 26/10/2016, 23/11/2016, 14/12/2016, 25/01/2017, 15/02/2017, 22/03/2017, 26/04/2017, 24/05/2017, 24/06/2017, 5-26/07/2017, 27/09/2017, 25/10/2017, 22/11/2017, 13/12/2017

EVALUATION BOARD

Prof. Nicola Moretti, Dott. Luigi Todaro, Prof. Domenico Pierangeli.

SEMINARS BY EXTERNAL EXPERTS YES