SCUOLA DI SCIENZE AGRARIE, FORESTALI, ALIMENTARI ED AMBIENTALI

ACCADEMIC YEAR: 2017/2018

TEACHING / MODULE: Machines for Forestry Uses (AGR09)

TYPOLOGY OF FORMATIVE ACTIVITY: Affine

LECTURER: Prof. Paola D'Antonio

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Lingua di insegnamento: ITALIANO

n. CFU: 6 including 5 lessons and 1 exercise / laboratory. n. Hours .56 Location: School: SAFE.		CdS: Course in Agricultural Sciences - University Code 0425 - Class L-25 - Agricultural and Forestry Sciences and Technologies.	Semester:II

FORMATIVE OBJECTIVES AND LEARNING RESULTS

Students will have to acquire the basic notions of general mechanics and applied to machines. Acquire the knowledge of machines used for forestry operations in the woods and their organization at a work site.

O Knowledge and understanding skills

The student must demonstrate knowledge of the main groups of machines for forestry use, their performance and technical characteristics, the work organization models and address the issues related to their proper management in respect of the environment and human health .

O Ability to apply knowledge and understanding:

The student must demonstrate to be able to analyze site and environment conditions of machine use and. To demonstrate how to know how to apply forestry mechanization to knowledge gained in different fields such as forestry, botany and arboriculture.

O Autonomy of judgment:

The student must be able to know how to independently evaluate and choose the most appropriate tools for setting up proper usage management strategies. The student must be able to adapt and / or modify the choice of machines for his / her autonomy of judgment in relation to the multiple and not always standardizable different endogenous and exogenous factors determining the type of use.

O Communicative Skills:

The student should have the ability to explain, in a simple way, to non-sectoral people the possible use machines for forest use, describing the operation and organization within the yard.

O Learning Skills:

The student must be able to update and enrich his / her knowledge continuously through consultation of texts and / or publications, computer tools, participation in courses and seminars in the mechanization sector, using the knowledge gained during the course

Prerequisites

Good knowledge of physics and mathematics is recommended.

CONTENTS OF THE COURSE

1st credit: topics discussed in lessons
Recalls of physics and mechanics applied to machines.

2nd credit: topics covered during lessons
Passive resistors and transmissions and endothermic motors.

3rd credit: topics covered during lessons
Forest utilization and shipyard organization.

4th credit: topics discussed in lessons
Forestry machinery.
5th credit: topics discussed in lessons
Innovative machines and satellite technologies.

6th credit: topics discussed in lessons
Exercises on: mechanical quantities and unit sizes and their application to machines.
Technical visits and laboratory

DIDACTIC METHODS

The course is organized in the following parts:
Frontal Teaching: through frontal lessons.
The verification of the acquisition of knowledge will be monitored through the constant teacher-student interaction also by the solicitation to ask questions or to propose topics during the lesson. In order to stimulate reflection, the teacher may ask questions to the student so that he can, on the basis of his / her knowledge, reach the solution to the problem himself. Written checks will be possible during the course.

2) Exercises: The student with the active participation in the laboratory exercises. By using the practical exercises in the lab the student will have the opportunity to apply the knowledge gained during the lectures.

TEACHING VERIFICATION MODES
Verification of learning will take place through an oral exam at the end of the course and will, of course, relate to the topics discussed during the course.

METHODS AND METHODS OF MANAGING REPORTS WITH STUDENTS

At the beginning of the course, after describing objectives, program and verification methods, the teacher collects the student list, complete with name, surname, enrollment and email for any communications.
Presumable reception time: Monday-Friday from 9am to 11am. These schedules may vary depending on any academic lessons or commitments that will be posted in a special bulletin board.
In addition to the weekly reception time, the teacher is available at any time for a student contact, through his or her email or by telephone contact on the fixed telephone

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REFERENCE AND MESSAGE TEXTS, DIDACTIC MATERIAL ON-LINE

Agrarian Mechanics, Volume, Unibas Editrice, by A. Arrivo and Paola D'Antonio
Agrarian Mechanics, Volume II, Unibas Editrice, by A. Arrivo and Paola D'Antonio
Intermediate forest mechanization, Utet, Spinelli.
For the purpose of viewing additional photographic material compared to the one shown during the lessons or for further information, web site addresses will be provided.
Notes provided during lessons.

DATE OF EXAMINATION REQUIRED

22/06 / 2017.20 / 07 / 2017.18 / 09 / 2017.16 / 10 / 2017.06 / 11/201711/12 / 2017.15 / 01 / 2018.19 / 02 / 2018.19 / 03 / 2017.16 / 04/2018.
Any variations due to academic commitments or lessons will be communicated by mail or by posting in a special bulletin board.

EXPERTS SEMINARS YES X NO

OTHER INFORMATION

Examination Board: Prof. Paola D'Antonio (President); Prof. Giovanni Carlo Di Renzo (member), Prof. Giuseppe Altieri (member).