ACADEMIC YEAR: 2019-2020

COURSE: Safety and ergonomics of forest sites

TYPE OF EDUCATIONAL ACTIVITY: Basic

TEACHER: Paola D'Antonio

e-mail: paola.dantonio@unibas.it	Web: http://www2.unibas.it/paoladantonio/ https://scholar.google.it/citations?user=v-Ho0PoAAAAJ&hl=it
Phone: 0971 205471	mobile: 329 3606240

Language: Italian

ECTS: (lessons / tutorials/practice): 6	n. of hours: 46 hours of lessons 10 hours of practice	Campus: Potenza School: SAFE Program: LM Forest and Environmental Sciences	Semester: I

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Content and knowledge

Will broadcast content and knowledge related to the main systems of work in the woods , of the technical and functional characteristics of the machines used in the forestry sector , the use of those applications, the main risk factors (ergonomics and safety) related to the various forestry work . Knowledge and ability to use the specific language of forest exploitation , mechanics and forestry mechanization , ergonomics and job security .

PREREQUIREMENTS
- Bachelor degree in Forestry and Environmental Sciences
- knowledge of Forestry Mechanisation

SYLLABUS
Lessons
CFU-1: Objectives of the discipline and its subdivision, regulatory landscape: Consolidated 81/2008 and ss.mm, criteria for risk assessment. CFU-2: Shipyards temporary or mobile. Safety signs, concept of accident, injury and occupational disease. Genesis of injuries: mode of occurrence and cause analysis, machine safety, risk analysis for the safety of some agricultural and forestry machinery (MSDSs), personal protective equipment: the reference standard; selection criteria.
CFU-3: Security of systems (elements). structural safety of the workplace (notes), fire risk assessment, prevention and protection, emergency management.
CFU-4: Physical hazards: noise. Physics of sound, noise measurement and risk assessment; prevention and protection, physical risks: vibration. Physical vibration. Measurement of the vibrations. reference standards and risk assessment; prevention and protection. Dusts: definitions; sampling methods and risk assessment; prevention and protection. dust sampling. Biological and carcinogenic risk in the agro-forestry sector. Risk assessment; prevention and protection.
CFU-5: Risks induced by adverse microclimate. Risk assessment; prevention and protection. Measurement and evaluation of micro-climatic parameters and comfort indices; chemical risk: substances and preparations; health facilities; the relevant regulations; prevention and protection. Machines for the distribution of pesticides. Ergonomics: manual handling and repetitive gestures. reference standard; risk assessment; prevention and protection.
Practices
CFU-6 (exercises): Check the machines used in the main cultivation operations and / or visits to companies and industry events to practical depth of topics covered in the lectures.
Risk Analysis (noise, dust, vibration, etc.) in a forest site.

TEACHING METHODS
The course includes 46 hours of lectures and 10 hours of laboratory exercises and field. During the exercises the students , organized in autonomous teams , will be called to analyze, even with specific reports , case studies and management considered within each exercise.

EVALUATION METHODS

Oral examination at the end of the course. Three questions, one of which related to topics addressed during practices.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- Teaching material distributed in classroom
- Hippoliti G. e Piegai F., 2000 - Tecniche e sistemi di lavoro per la raccolta del legno. Ed. Compagnia delle Foreste, Arezzo.
- Baldini S., 1998 - Appunti delle lezioni del corso di Utilizzazioni forestali. Università della Tuscia, Viterbo.
- Fabiano F., Marchi E., Piegai F., 2001 - Note pratiche per l'impiego di alcuni sistemi di esbosco a basso impatto ambientale.
- Regione Veneto, 1999 - La valutazione dei rischi e la tutela della sicurezza nei cantieri forestali. Ed. Papergraf.

INTERACTIONS WITH STUDENTS
- in the office at planned days/hours (usually on Wednesday)
- email, skype (every time)
- mobile (every time)

EXAMINATION SESSIONS (Forecast)

Calendar:
12/2/2020
18/3/2020
15/4/2020
24/6/2020
15/7/2020
23/9/2020
21/10/2020
16/12/2020
17/2/2021
14/4/2021
https://unibas.esse3.cineca.it/Home.do
EVALUATION BOARD

Paola D'Antonio
Luigi Todaro
Giovanni Carlo Di Renzo

SEMINARS BY EXTERNAL EXPERTS   YES