UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	
ACADEMIC YEAR	
ANNO ACCADEMICO EROGAZIONE	
SUBJECT	
CODE	
SCIENTIFIC SECTOR(S)	
HEAD PROFESSOR(S)	LA MELA VECA DONATO SALVATORE Ricercatore Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	
TERM (SEMESTER)	
ATTENDANCE	
EVALUATION	
TEACHER OFFICE HOURS	**LA MELA VECA DONATO SALVATORE** Tuesday 11:00 13:00 Studio del docente, Edificio, 4, Ingresso H, stanza 23 - viale delle Scienze - Palermo Thursday 11:00 13:00 Studio del docente, Edificio, 4, Ingresso H, stanza 23 - viale delle Scienze - Palermo

PREREQUISITES	Basic knowledge of plant biology, forest botany, and forest ecology
LEARNING OUTCOMES	Knowledge and understanding: acquisition of the scientific bases and fundamental techniques of Forestry and Dendrology. Ability to use the specific language. Knowledge of the objectives of a forest cultivation and ability to choose the appropriate techniques. Ability to apply knowledge and understanding: ability to analyse the characteristics and cultivation requirements of a forest ecosystem, to identify and conduct surveys and processing necessary for the analytical description of forest stands and the choice of the most appropriate cultivation techniques. Making judgments: to be able to evaluate the implications and results of cultural practices and analyse the functional response of the forest in relation to cultural practices performed; be able to assess technical and cultural errors and forest responses to the expected outcome and correct management requirements in relation to them. Communication skills: ability to explain the reasons and the expected results of silvicultural techniques adopted to a non-expert audience and be able to highlight their environmental impacts. Learning capacity: ability to upgrade with the consultation of technical and scientific publications related to the autoecology of forest species, dendrology and forestry; ability to follow, using the knowledge acquired during the course, the training activities of the second level degrees, seminars and specialized scientific conferences in the field.
ASSESSMENT METHODS	1) one midterm written tests and one final through a comprehensive set of closed questions (matching and multiple choice). 2) An oral exam in addition (optional) or in place of the two written tests. In the first case, the examinees must answer specific questions on subjects for which they gave wrong answers during the written test and the exam is to improve the evaluation acquired with written tests. In the second case, the examinees must answer at least two / three questions posed orally, on all topics covered in class, with reference to the recommended text books.
EDUCATIONAL OBJECTIVES	The course provides students with; - the scientific assumptions of silviculture on forest ecology base; - the analytical tools for describing characters of forest stands and the interpretation of evolutive / regressive dynamics; - the knowledge of forestry techniques, silvicultural system of stands; - the basic information on terrestrial biomes, on forest vegetation in Europe with particular reference to the autoecological of species that have repercussions on silviculture of Mediterranean forests.
TEACHING METHODS	Frontal lessons, technical visits and in field practical activities
SUGGESTED BIBLIOGRAPHY	Piussi P. e Alberti G., 2015. Selvicoltura generale. Boschi, societa' e tecniche colturali. Compagnia delle Foreste. Arezzo. Bernetti G., 2015. Le piante del bosco. Forma vita e gestione. Compagnia delle Foreste. Arezzo Altre pubblicazioni di approfondimento forniti dal docente.

SYLLABUS

Hrs	Frontal teaching
2	Objectives and presentation of the course
4	Silviculture: definition, meaning, necessity, utility and history
2	Forest tree: size and habitus, growth, senescence and death
6	Forest and forest site: definition and functions of the forest, physical environment and site description, qualitative and quantitative description of forest stands, Kraft and De Pjilippis tree classifications, silvicultural system
8	High forest: natural regeneration (seed), even-aged forest, uneven-aged forest, clear felling, shelterwood felling, selection felling
4	Intermediate cutting (thinning) and pruning
7	Coppice forest: simple and with standars coppice, coppice selection system,
4	Conversions and transformations: definitions, opportunities and technical details.
2	Biomes and the European bio-geographical regions
2	Italian forest landscapes
3	International, European and local classification systems of forest vegetation
8	Selviculture of the main Mediterranean forest categories: Mediterranea maquis, Mediterranean pine forests, evergreen and deciduous oak forests, beech and chastnut forests

Hrs	Practice
6	Technical visit: management of Mediterranean conifer reforestation
6	Assessment of the Mediterranean forest resilience