General Information	
Academic subject	Dendrometry and Forest Management
Degree course	Land and Environmental Science and Technology
Curriculum	
ECTS credits	9
Compulsory attendance	No
Language	Italian

Subject teacher		Name Surname	Mail address	SSD
		Patrizia Tartarino	Patrizia.tartarino@uniba.it	AGR/05

ECTS credits details	Field	SSD	Credits
Basic teaching activities	Agricultural and forestry systems	AGR/05	9

Class schedule	
Period	II semester
Year	third
Type of class	Lecture- workshops on the field and in the woods

Time management	
Hours	225
In-class study hours	90
Out-of-class study hours	135

Academic calendar	
Class begins	5th March 2018
Class ends	22nd June 2018

Syllabus	
Prerequisites/requirements	
Expected learning outcomes (according to Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in A4a, A4b, A4c tables of the SUA-CdS)	*Knowledge and understanding* Capacity to estimate the dimensional parameters of the single trees, standing or cut down, and of woods, and also the increase of both, by improving the utilization of the different measure equipment. The acquired capacities are also introductory to the quantification of the vegetable biomass present in the interested ecosystems, of carbon fixed from the same and of the silvicultural interventions necessary for a better forest management. *Applying knowledge and understanding* Capacity to compile a management plans of the vegetation of forest interest (maquis, maquis-forests and forests), spontaneous or deriving from plant-ing, included or not in protected areas. *Making informed judgements and choices* Capacity of stand alone judgment in the solution of various issues concerning dendrometric and managerial aspects *Communicating knowledge and understanding* Ability to express themselves through clear and scientifically correct language *Capacities to continue learning*

	Ability to acquire theoretical and practical competencies that will be used in the liberal profession activities, and in the public and in the private Administration of the competence field.
Contents	**DENDROMETRY** 1 Trees bearing 1.1 Stem conformation 1.2 Crown conformation 2 Measure equipment 2.1 Calliper, coppice - measurer and pentaprism 2.2 Hypsometers 2.3 Increment borer and increment marker 3 Estimation of stems volume and cut boles 3.1 General parabolic lines equation 3.2 Measure method of paraboloids of rotation 3.3 Form factor and reduction factor 3.4 Cavalieri's method and Eulero's integral 3.5 Huber's method 3.6 Sections measure 3.7 Error calculation and comparison amoung the different meas-ure methods 4 Estimation of mercantile assortments volume 5 Estimation of wood and bark volume 6 Estimation of single standing trees volume 6.1 Empirical methods 6.2 Pressler's method 7 Estimation of the basal area per hectare 7.1 Direct method 7.2 Indirect method 8 Estimation of trees and woods height 8.1 Trees heights 8.2 Medium, form and stand height, stature 8.3 Costruction of the hypsometric curve 9 Analytical and indirect estimation of the volume of a standing trees group 9.1 General and local volume tables, single and double entry and their application 9.2 Dendrometric, cormometric, assortment tables and of reduction factors 9.3 Costruction of volume tables 10 Analytical direct estimation of the volume of a standing trees group 11 Relascopy 12 Forest Auxonomy

	FOREST MANAGEMENT 1 – Introduction to the course, notice on the historical development of the forest management and its tasks 2 – Structure of the forest management plan 3 – The management compartimentation 4 – Forest tax relief and dendrometric and dendroauxometric cruises 5 – Normal wood and abnormalities 6 – Forest management methods, yield determination and silvicul-tural interventions plan 7 – Cartography and forest management information systems
Course program	
Bibliography	• La Marca O. 2004. Elementi di Dendrometria. Firenze. • Patrone G., 1944. Lezioni di Assestamento forestale. • Patrone G.; 1940. Lezioni di Dendrometria. Coppini • Pardé J., Bouchon J.. Dendrométrie. ENGREF. • Ciancio O., Nocentini S., 2004. Il bosco ceduo. Selvicoltura assestamento gestione. Acca-demia Italiana di Scienze forestali. Firenze.
Notes	
Teaching methods	The course topics will be discussed with the help of presentations in Power Point
Assessment methods (indicate at least the type written, oral, other)	The exam consists of an oral test with questions related to the programme developed during lectures and laboratory classes in the hall and in action, as reported in the teaching Regulations of the Degree course in Land and Environmental Science and Technology (article 9) and in the study plan (Annex A). Before the exam, the student must present to the professor a written report about the results of datas elabo-ration obtained during laboratory activities. For students who have supported exoneration, the assessment of the profit test is expressed as the average between the vote on the exoneration and the profit test.
Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are.	The committee will evaluate how the student will have achieved the " Expected learning outcomes " and will have acquired the "Contents" (see individual headings above)
Further information	Visiting hours: on Tuesday from 9.30 am to 12.30 am, or by appointment