

Main course information	
Academic subject	Plant Ecology
Degree course	Master's degree in Environmental Biology
Degree class	LM/6
ECTS credits (CFU)	6
Compulsory attendance	Strongly recommended
Teaching language	Italian
Accademic Year	2019/2020

Professor/Lecturer	
Name & SURNAME	Luigi Forte
email	luigi.forte@uniba.it
Tel.	080 5442168
Tutorial time/day	Thursday from 1:00 p.m. to 2:00 p.m. at the studio located on the first floor of the Botanical Garden Museum, University Campus

Course details	Pass-fail exam/Exam with mark out of 30	SSD code	Type of class
	Exam with mark out of 30	BIO/03	Lecture/workshop

Teaching schedule	Year	Semester
	II	II

Lesson type	CFU/ECTS	Lessons (hours)	CFU/ECTS lab	Lab hours	CFU/ECTS tutorial/workshop	Tutorial/workshop hours	CFU/ECTS field trip	Field trip Hours
		5,5	44	0	0	0,5	6	0

Time management	Total hours	Teaching hours	Self-study hours
	150	50	100

Academic Calendar	First lesson	Final lesson
	I March 2020	12 June 2020

Syllabus	
Course entry requirements	Basic knowledge of Botany, Systematic Botany, Plant physiology and Ecology
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)	
<i>Knowledge and understanding</i>	The student will have to know the different levels of analysis of plant on the Earth: Flora, Vegetation and Complexes of vegetation. Current and previous factors that cause the distribution of plant species. He/she will have to be able to understand the relationships among ecologic factors and floristic composition, structure, dynamic and distribution of plant communities. This knowledge, as well as the ability in comprehension, will be acquired through classroom lectures and field trips.
<i>Applying knowledge and understanding</i>	The student will have to develop the ability in phytoclimatic diagnosis and in reading and interpreting the vegetation mosaic and vegetation Complexes (Plant Landscape). This skill will be acquired through classroom lectures and field trips.
<i>Making informed judgements and choices</i>	The student will have to be able to understand the causes of the plant distribution of the ecosystems at different levels of expression. This skill will be acquired through classroom lectures and field trips.
<i>Communicating knowledge and understanding</i>	The student will have to acquire the lexicon and the scientific terminology peculiar to the discipline, in order to successfully work at his/her activity of scientific divulgation, to work in teams involved in environmental conservation, as well as to comprehend possible in-depth analysis through specialized bibliography. This skill will be acquired through classroom lectures and during moments of interaction teacher-student which

	will be stimulated by the teacher during the course.
Capacities to continue learning	The student will have to acquire the ability to deepen and read with critical sensibility the evolution of the discipline, by consulting texts and data bases. This ability will be acquired through the consultation of the webography that will be suggested by the teacher during the course.

Syllabus	
Course content	<p>The course, after a presentation of the goals and methods of Geobotany and an introduction to the concepts of Flora, Vegetation and Complexes of Vegetation (Plant Landscape), provides the illustration of contents about:</p> <ul style="list-style-type: none"> - ecologic factors and their relationships with plants (soil science, climatology and phytoclimatology, ecology of fire, man as an ecologic factor); - chorology (distribution areas and factors that define their shape and dimension, kind of distribution areas and methods of construction and representation, geoelements, with specific regard to Italian flora, endemisms, chorologic spectra, floristic territories and the phytogeographic classifications, historical aspects of Flora; - vegetation science (plant communities and their spatial and temporal organization, criteria in the study of vegetation, discontinuity and continuity approach, phytosociological method, plant association and the other phytosociological units, vegetation zones and belts, zonal, azonal and extrazonal vegetation, the major biomes on Earth, vegetation dynamism, primary and secondary successions, climax concept, vegetation series); - landscape ecology (aims and methods, geosynphytosociology). <p>The contents of the field trips will deal about the subjects debated during class lectures.</p>
Course books/Bibliography	<p>Ubaldi D., 2012 – Guida allo studio della flora e della vegetazione. Clueb, Bologna. Ubaldi D., 2003 - Flora, fitocenosi e ambiente. Clueb, Bologna. Pignatti S., 1994. Ecologia del Paesaggio. UTET, Torino. Pignatti S., 1995. Ecologia vegetale. UTET, Torino.</p>
Notes	All the texts suggested are available for reference at the Library of the Plant Biology Section of the Department of Biology. During the course, electronic documents as well as course slides will be provided, though they must not be considered as lecture notes. The use of class notes is strongly recommended.
Teaching methods	Classroom lectures supported by multimedia tools and field trips aimed at the identification and field direct analysis of adaptation strategies of the main species of different Biomes, by means of comparative analysis of diagnostic characters. Moments of interaction teacher-student stimulated by the teacher during the classroom lectures.
Assessment methods (indicate at least the type written, oral, other)	Oral exam is the main instrument for the assessment which, however, will be based upon the regularity in attending the course as well. For the final assessment, clarity in the presentation and a correct use of language will be considered too.
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)	<p>Knowledge and understanding The student will have to demonstrate to know all the contents of the teaching subject and particularly will have to prove that he/she has acquired the basics about the different levels of expression of the plant on the Earth and the causes of the geographic distribution of flora and vegetation on the planet. He/she will have to prove to have fully understood the relationships among the different modules of the coursework (ecological factors, flora and vegetation) and to be able to make connections with other disciplines. However, details that are peculiar to other disciplines are not required; what is required is the ability to grasp what, of the other disciplines, is the cultural and cognitive background that is necessary to a full comprehension of ecologic issues dealing with plants. The knowledge of these topics is necessary to pass the exam, while the mere acquisition of basics notions allows an assessment which will not exceed a middle level.</p> <p>Applying knowledge and understanding The student will have to be able to use the instruments for phytoclimatic station diagnosis and for the reading and interpretation of vegetation mosaic. These skills are essentials to pass the exam.</p> <p>Making informed judgements and choices</p>

The student will have to demonstrate the ability to interpret the relationships among the distribution of species, of communities and of plant landscapes and related causes. This skill allows to get a very positive assessment.

Communicating knowledge and understanding

The abilities to express concepts and formulate interpretations, with a correct use of language and clarity in exposition, making use of the scientific terminology learnt during the semester, will be greatly appreciated. These skills, together with the previous one, ensure a very positive assessment of the competence and performance of the student.

Capacities to continue learning

During the final examination, the student must show to have acquired critical abilities and that he/she is able to achieve new knowledge on his/her own. Possessing these abilities will contribute to a strongly positive assessment of the final exam.

Further information