General Information	Academic'Year 2020/2021
Academic subject	Geobotany I.C.
Degree course	Natural Sciences (I level)
ECTS credits	6
Compulsory attendance	Strongly recommended
Language	Italian

Subject teacher	Name Surname	Mail address
	Luigi Forte	luigi.forte@uniba.it

ECTS credits details	Area	SSD	CFU/ETCS
	05	BIO/03	6

Class schedule	
Period	II semester
Year	III
Type of class	Lecture, workshop and field exercises

Time management	
Hours	150
In-class study hours	54
Out-of-class study hours	96

Academic calendar	
Class begins	March 2021
Class ends	June 2021

Syllabus	
Prerequisites/requirements	Basic knowledge of Systematic Botany, Plant physiology, Geography and Physical Geography, Ecology and Geomorphology
Expected learning outcomes	● *Knowledge and understanding on:* 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. ● *Applying knowledge and understanding on:* 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. ● *Making informed judgments and choices:* 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. ● *Communicating knowledge and understanding* The student will have to acquire geobotanical lexicon and terminology, aimed at carrying out activities dealing with naturalistic divulgation and at understanding possible in-depth analysis through specialized bibliography. This ability 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.
Contents	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: - 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). The contents of the field trips will deal about the subjects debated during class lectures.

Course program	
Bibliography	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.
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	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	● *Knowledge and under standing:* 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 course (ecological factors, flora and vegetation) and to be able to make connections with other disciplines, even abiotic, since Geobotany is not exclusively a biologic discipline. However, details that are peculiar to other disciplines are not required; what is required is the ability to grasp what, of the other disciplines, enables to comprehend Geobotany. 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. • *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. • *Autonomy of judgment*: 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	