Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Allgemeine Arborikultur
Code der Lehrveranstaltung	40220
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	AGRI-03/A
Sprache	Italienisch
Studiengang	Bachelor in Nachhaltiger Land- und Forstwirtschaft in Berggebieten
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	Prof. Massimo Tagliavini, Massimo.Tagliavini@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/209 Prof. Carlo Andreotti, Carlo.Andreotti@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/27175
Wissensch. Mitarbeiter/Mitarbeiterin	Dott. Anna-Lena Haug
Semester	Erstes Semester
Studienjahr/e	2
KP	5
Vorlesungsstunden	32
Laboratoriumsstunden	18
Stunden für individuelles Studium	75
Vorgesehene Sprechzeiten	15
Inhaltsangabe	The course of General Arboriculture falls within the subject area of crop production and is a characterising course (attività formativa caratterizzante). During the course, the following contents will be

	covered: Tree morphology Basics of tree physiology Vegetative cycle Reproductive cycle (fruit growth and maturation) Tree propagation Tree plantation establishment General criteria of tree management
Themen der Lehrveranstaltung	Morphology of the Aboveground and Root Systems of Trees Bud Formation and Floral Biology Fruit Growth, Maturation and Harvesting Vegetative Growth and Development Propagation and Organization of the Nursery System The Growing Environment and Its Interactions with Trees Orchard Establishment Training Systems and Pruning Water relations and light response of trees Principles of Irrigation, Fertilization, Soil Surface Management, and Fruit Thinning
Stichwörter	Fruit Tree Cultivation, Physiology, Morphology and Propagation
Empfohlene Voraussetzungen	A successful completion of the 1st-year course "Fundamentals of Plant Production"
Propädeutische Lehrveranstaltungen	No
Unterrichtsform	The course combines lectures, field visits, field and laboratory exercises
Anwesenheitspflicht	No
Spezifische Bildungsziele und erwartete Lernergebnisse	Knowledge and Understanding The degree course provides advanced knowledge for the training of professionals capable of carrying out management and coordination activities in mountain and forestry agriculture, as well as effectively preparing students for possible further studies. All these skills will be transmitted to the graduates by means of face-to-face lecturing, technical and practical laboratory exercises, field exercises and educational-scientific excursions. The elaboration of the experimental thesis may be carried out both in the faculty's laboratories and in companies and local authorities. At the end of their studies, the three-year graduate at Sustainable

	agriculture and forest management in mountain environment possesses basic knowledge of mathematics, physics, chemistry, statistics, and the biology of plant and animal organisms and microorganisms. The expected learning outcomes can therefore be summarised as: an understanding of the fundamental aspects of the biology, physiology and ecology of organisms with particular reference to those of agricultural and forestry interest, including their genetic improvement and relationships with beneficial or pathogenic organisms and micro-organisms; being able to read and understand advanced texts relating to the various aspects characterising the agrarian and agro-forestry environment in mountainous areas; being able to communicate and discuss issues relating to the training course in an appropriate manner in the three languages (Italian, English, German). The knowledge and comprehension skills listed above are achieved through participation in lectures, practical exercises, seminars, and through guided personal and individual study as envisaged by the training activities offered. Some courses in the syllabus may be offered in a dual mode (lectures face-to-face and in video-recorded form and made available on the university intranet platform). The assessment of the achievement of learning outcomes takes place mainly by means of exams and possible in -progress tests. The tests may be written and/or oral, and may also consist of reports and oral presentations of projects or seminars. Ability to apply knowledge and understanding In addition to acquiring a solid scientific-technological foundation, the ability to tackle new problems, both practical and real, is stimulated, with the aim of enabling the student to acquire a working method. The three-year graduate in sustainable agriculture and forest management in a mountain environment, thanks to a technical-scientific training integrated with economic-managerial subjects, must: knowing how to operate the farm properly; know how to transfer the acquired skills related to plant and animal production, crop protection and soil fertility into practice; knowing how to handle the production of agricultural products; to know how to set up and manage sustainable

	agricultural/forestry systems in mountain environmental contexts, based on knowledge of agricultural production systems and their economic and marketing aspects, considering environmental impact, product quality and consumer health. The ability to apply knowledge is achieved through critical reflection on the texts proposed for individual study stimulated by classroom activities, the study of research and application cases shown by the lecturers, the performance of practical laboratory and field exercises, bibliographical research, individual and/or group projects as part of the fundamental and optional courses included in the teaching plan, as well as during the internship and preparation for the final examination. The tests carried out by means of written and/or oral examinations, reports and exercises include the performance of specific tasks in which the student demonstrates mastery of tools, methodologies and critical autonomy. In the internship activities, the verification takes place through the presentation of a report by the student to the teacher of reference. Making judgements At the end of their studies, graduates possess an awareness and autonomy of judgement that enable them to acquire the necessary information, and to assess its implications in a production, environmental and market context, to implement interventions to improve the quality, efficiency and sustainability of agricultural/forestry production processes. In accordance with the knowledge acquired, the graduate is able to make independent judgments on problems relating to the overall management of the agricultural enterprise and relevant to his or her professional activity. Autonomy of judgement is developed and verified through the exercise activities, the organised seminars, the preparation of papers as part of the teaching, as well as during the internship activity and the activity assigned by the lecturer for the preparation of the final examination. Communication skills The graduate has the ability to use the most modern and effective means of communication to disseminate the research carried out and the analyses relating to the problems of agro-forestry and

	forest management; he/she is able to deal with the production realities in the agro-forestry sector and to interact with figures from the sector and related sectors. Communication skills are particularly developed during exercises, the organised seminars, as well as during training activities that also involve the preparation of reports and written documents and the oral presentation of the same. Since the course is trilingual, graduates are able to communicate correctly, in written and oral form, in Italian and in two other languages (German and English). In tutorial activities and seminars, students are encouraged to speak publicly in order to improve their ability to describe clearly and comprehensibly any doubts and/or requests for clarification on specific topics. The acquisition and evaluation/verification of the achievement of communication skills are also provided for during the internship and the final report, as well as when writing and discussing the final paper. Learning skills The degree course provides the basic cognitive tools indispensable for the continuous updating of knowledge, also with tools that make use of new communication and information technologies. The graduate is able to apply the developed learning methods and tools to update and deepen the studied contents, also in professional contexts and to undertake further studies.
Spezifisches Bildungsziel und erwartete Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	The course examination is conducted on the basis of an oral test with questions testing the knowledge acquired, its understanding and its application and transfer to applied cases
Bewertungskriterien	Criteria for awarding the grade: the clarity of the answer, the appropriate use of the terminology, the ability to summarise, the argumentative pertinence, the autonomy of judgement and the ability to re-elaborate are assessed.
Pflichtliteratur	Copies of the slides presented by the lecturers available in the 'reserve collection'

	- Sansavini S. et al. (ed.), General Arboriculture. Patron publisher. 2012.
Weiterführende Literatur	Dizionario tecnico trilingue "The terms related to grapes and fruit: a small technical dictionary" Applied Tree Biology di Andrew D. Hirons e Peter A. Thomas. 2018 Gentile, Inglese e Tagliavini (ed.), Arboricoltura Speciale. Edagricole. 2022
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	Keine Armut, Kein Hunger, Leben an Land, Nachhaltiger Konsum und Produktion, Gesundheit und Wohlergehen