Syllabus

Course Description

Course Title	Laboratory of Wood anatomy and productive forestry
Course Code	42608
Course Title Additional	
Scientific-Disciplinary Sector	NN
Language	Italian
Degree Course	Professional Bachelor in Wood Technology
Other Degree Courses (Loaned)	
Lecturers	Prof. Leonardo Montagnani, leonardo.montagnani@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/24975
Teaching Assistant	
Semester	First semester
Course Year/s	1
CP	3
Teaching Hours	0
Lab Hours	30
Individual Study Hours	45
Planned Office Hours	9
Contents Summary	- Identification in the field of the primary woody species and comprehension of silvicultural systems for timber production - Macroscopic identification of the most commonly utilized wood species - Microscopic identification of the most frequently employed wood species - Practical knowledge of the principal wood processing systems - Understanding of the main wood assortments - Criteria for classifying wood products
Course Topics	Macroscopic and microscopic structure of homoxyl and heteroxyl

	timbers Main woodworking techniques Recognition and classification of defects in sawn timber
Keywords	Anatomical structure of wood Woodworking techniques Defects in sawn timber
Recommended Prerequisites	Botany
Propaedeutic Courses	
Teaching Format	Educational field trips and laboratory exercises.
Mandatory Attendance	Participation in field trips and laboratory sessions is strongly recommended.
Specific Educational Objectives and Learning Outcomes	The course is part of the core learning area of the professional Bachelor's degree in Wood Technologies. The student is expected to acquire knowledge and skills related to the macro- and microscopic identification of the main commercially important wood species, their physical and technical properties, and some elements of forest management. Knowledge and understanding: • D1.1 – Knowledge of the key concepts and technologies of data science disciplines • D1.2 – Understanding of the skills, tools and techniques required for an effective use of data science • D1.11 – Knowledge of the main algorithms for data analysis, and of elements of the complexity theory Applying knowledge and understanding: • D2.2 – Ability to address and solve a problem using scientific methods • D2.4 – Ability to develop programmes and use tools for the analysis and management of data and related infrastructures Making judgments • D3.2 – Ability to autonomously select the documentation (in the form of books, web, magazines, etc.) needed to keep up to date in a given sector Communication skills • D4.1 – Ability to use English at an advanced level with particular reference to disciplinary terminology. Learning skills

	• D5.3 – Ability to deal with problems in a systematic and creative way and to appropriate problem solving techniques.
Specific Educational Objectives and Learning Outcomes (additional info.)	Understanding the main elements of the forest-wood supply chain
Assessment	The assessment of students attending the course will be based on the time and effort dedicated during exercises and laboratory sessions. Students who are unable to attend the practical sessions will be required to submit a written assignment.
Evaluation Criteria	Assessment PASS/FAIL. The assessment will be considered positive if the attention during the course, the commitment shown in the laboratory sessions, and the required readings are deemed satisfactory. In the event of non-attendance, a specifically prepared written assignment will be evaluated.
Required Readings	Title: La struttura anatomica del legno ed il riconoscimento dei legnami italiani di più corrente impiego Author: Raffaello Nardi Berti ISBN: 10:88-901660-0-2 CNR-IBE Title: Manuale di scienza e tecnologia del Legno Authors: Gabriele Bonamini - Luca Uzielli ISBN: 9788879924405 Edizioni CLUT
Supplementary Readings	Recent technical-scientific literature will be made available during the course
Further Information	
Sustainable Development Goals (SDGs)	Industry, innovation and infrastructure, Climate action, Responsible consumption and production