Syllabus

Course Description

Course Title	Livestock production systems in mountain areas
Course Code	47300
Course Title Additional	
Scientific-Disciplinary Sector	AGRI-09/C
Language	English
Degree Course	Master in Smart Sustainable Agriculture Systems in Mountain Areas
Other Degree Courses (Loaned)	
Lecturers	dr. Thomas Zanon, Thomas.Zanon@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/42463
Teaching Assistant	
Semester	First semester
Course Year/s	1
CP	6
Teaching Hours	36
Lab Hours	24
Individual Study Hours	90
Planned Office Hours	18
Contents Summary	The Module will cover the following topics: 1. Structures of animal production in mountain areas, 2. Production and management systems of dairy and beef cattle, 3. Production and management systems of pigs, 4. Production and management systems of small ruminants (sheep and goat), 5. Production and management systems of poultry, horses, 6. Production and management systems of horses, 7. Production and management of non-domesticated species (e.g. deer)

Course Topics	General Introduction to Livestock Farming Livestock Farming in Mountain Areas Precision Livestock Farming Feeding Management Housing Management Animal Health and Welfare Animal Product Quality Ecological sustainability in mountain livestock farming
Keywords	animal science; livestock; dairy; beef; mountain farming; health and welfare;
Recommended Prerequisites	Basic knowledge on livestock production form the bachelor course
Propaedeutic Courses	No
Teaching Format	Lectures, Problem Based Learning, Excursions
Mandatory Attendance	No
Specific Educational Objectives and Learning Outcomes	Knowledge and understanding --> - Actively participate in research projects in the field of mountain agriculture - Apply the fundamental principles of occupational safety (internal and external) in the field of mountain agriculture - Collaborate with other professionals in the fields of architecture, engineering, and natural sciences - Work in interdisciplinary, national, and international teams - Organize continuing education in the field of mountain agriculture Ability to apply knowledge and understanding --> Graduates of the Master's degree program (Master SAM) are equipped with a solid scientific and technical foundation that enables them to address and solve complex problems. Thanks to their scientific and technical training in agriculture, economics, and management, graduates are able to develop analyses and plans for the development and management of agricultural businesses in mountain regions, taking into account their specificity and multifunctionality (ecosystem services). In these specialized fields, graduates are able to coordinate interdisciplinary teams in the

	agricultural sectors. The ability to apply acquired specialized knowledge is achieved through critical reflection on the course materials and classroom learning activities, complemented by case study analysis and practical exercises conducted by instructors. Furthermore, practical exercises in the laboratory, on the computer, and in the field are included, as well as excursions, literature research, the development of individual and/or group projects, and the preparation of the final thesis. Assessment of success (oral and written exams, seminar reports) and practical exercises are designed to ensure that graduates demonstrate mastery of the tools and methods learned, as well as a critical and independent approach to working. Autonomy of judgement --> - choose the best production techniques while taking environmental protection into account; - analyze data and information to independently assess the quality and effectiveness of results obtained when designing strategies to manage difficulties. - make independent decisions on professional issues. These may specifically concern the feasibility of agricultural projects. - evaluate quality assurance systems for agricultural products, including those in the tourism sector, and the methods for defining internal and external quality criteria. - plan activities and strategies based on predefined objectives, taking into account timeframes and methods. Communication Skills --> Graduates will be able to work professionally in one or more foreign languages. Mandatory courses and elective courses are taught in English. Additionally, some elective courses may be offered in Italian or German. In accordance with unibz's trilingualism policy, the unibz Language Centre offers the opportunity to take extracurricular courses (levels A1-C1) in Italian and German. Graduates will be able to communicate fluently with other professional groups they work with and will be able to participate in European projects with foreign partners thanks to the international focus of the Master's program. Written and oral

	communication skills are promoted through seminars, excursions, exercises, and teaching activities, which include the preparation of reports and written documents and their oral presentation in English and, where appropriate, in Italian and German in elective subjects. The aforementioned communication skills are also acquired and assessed/verified through the writing of the final thesis and its defense in English. The master's degree program also promotes the acquisition of additional language skills in German and Italian. This should enable graduates to successfully enter the international job market (e.g., Austria-Switzerland-Italy-Germany). Learning Capacity --> Graduates will be able to manage complex projects thanks to the specialized knowledge acquired during their studies. They will be able to continuously expand and update the specialized knowledge acquired during their studies. They will learn to use the most modern methods to competently perform analyses, project planning, and management measures in their professional lives. Graduates will be able to use various information systems to further their cultural and professional development. They will also be able to choose the methods and training paths best suited to their cultural and professional development. Graduates will be able to manage complex projects thanks to the specialized knowledge acquired during their studies. They will be able to continuously expand and update the specialized knowledge acquired during their studies. They will learn to use the most modern methods to competently perform analyses, project planning, and management measures in their professional lives. Graduates will be able to use various information systems to further their cultural and professional development. They will also be able to choose the methods and training paths best suited to their cultural and professional development. Learning skills are encouraged throughout the degree program. Special emphasis is placed on individual study, especially in completing group work on proposed topics. This skill is enhanced during compulsory lectures, which include group work, and subsequently in the preparation of the final thesis. Learning progress is assessed regularly throughout the courses and during the preparation of the final thesis. Specifically, this practice-

	oriented program involves working in small groups (3-5 students) on a shared project (e.g., a plan for the development of agricultural businesses in mountain areas), from the initial stages (development of objectives and measures, collection of available data) to cooperation with various stakeholders (e.g., public administration, mountain agriculture advisory center, farmers' association), which also includes communication activities for agriculture and society. The projects are carried out under the supervision of two or more professors, with exchanges between students and the private companies and/or public authorities involved. Learning skills are assessed through continuous assessment during the learning units and in the preparation of the final thesis.
Specific Educational Objectives and Learning Outcomes (additional info.)	none
Assessment	Written Exam and PBL
Evaluation Criteria	Mark from written exam (60%) and PBL (40%)
Required Readings	All relevant information are included in the slides
Supplementary Readings	Nothing
Further Information	
Sustainable Development Goals (SDGs)	Zero hunger, Life on land, Responsible consumption and production