Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

Syllabus
Course description

Course title	Food processing equipment
Course code	44708
Scientific sector	AGR/09
Degree	Food Sciences for Innovation and Authenticity
Semester	I
Year	II
Academic year	2024/2025
Credits	6
Modular	No

Total lecturing hours	36
Total exercise hours	24
Attendance	Highly recommended
Prerequisites	General notions of information technologies, biology and physics
Course page	

Specific educational objectives	The course aim is to provide the attendants theoretical and practical fundamentals of the basic principles of a food production chain, focusing on the engineering and organisational aspects of the food processing equipment that must be there used. Particular emphasis will be devoted to the conceptual tools that must be used in the designing of a full production industrial line. The aim of the course is to offer a general overview of scientific contents combined with specific professional skills and knowledge. In addition, the student will acquire soft skills connected to scientific presentations or reports.

Lecturers	Dr. Giovanni Carabin giovanni.carabin@unibz.it; https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/academic-staff/person/35346-giovanni-carabin Dr. Alessio Tugnolo atugnolo@unibz.it https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/49428-alessio-tugnolo
Scientific sector of the lecturer	AGR/09
Teaching Assistant	
Office Hours	After consultation and agreement with lecturers

Learning outcomes	Knowledge and understanding of the conceptual design and planning of an industrial food production line, including insights in the food unit operations and related physical running principles. Applying knowledge and understanding in scientific and professional environments, focusing on specific case studies. Applying analytical and modelling tools for conceptual and practical designing of production lines. Making judgments when assessing different solutions for a given technological application on the basis of its technical, organizational and economic

	performances. Achieving the basis for investment assessment. Communication skills in presenting scientific results in written and oral form, in particular using an appropriate English language, as well as proper graphical tools for exhaustive analytical reports. Learning skills concerning the ability to find information on the web and access their validity, to use and transmit the technical knowledge acquired in the course.

Assessment	The assessment is carried out via an oral examination aimed to check the knowledge, the presentation skills and the practical know how acquired in the course. The oral part (max 45 minutes) consists of a scientific presentation (using power point) on a topic selected by the applicant; the presentation is prepared individually at home followed; further 2-3 questions on topics presented during lectures will follow.
Assessment language	ENGLISH
Evaluation criteria and criteria for awarding marks	The criteria that will be relevant for assessment will consider clarity of answers, mastery of language, ability to summarize, evaluate, and establish relationships between topics, capability of managing graphical designing tools.

Required readings	Materials distributed by the teachers
Supplementary readings	Materials distributed by the teachers