Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

Syllabus
Course description

Course title	Food-human axis: the gut microbiome
Course code	46029
Scientific sector	AGR/16
Degree	PhD in Food Engineering and Biotechnology
Semester	2
Year	1
Academic year	2017/2018
Credits	3
Modular	NO

Total lecturing hours	30
Total lab hours	
Total exercise hours	
Attendance	Not compulsory
Prerequisites	
Course page	

Specific educational objectives	*This course provides several examples, in term of case studies, of the effect of the diet and functional foods on the human gut microbiome.* *The course consists of one module of 30 hours of frontal lectures.* *The case of studies regard the effect of the dietary habits, including the Mediterranean diet, fibers, functional foods and other nutrients on the microbiota composition, functionality and metabolome.* *The course has the educational objective to address the students to manage with the general microbiology and in particular with the conditioning and monitoring of the human gut microbiota diversity and its repercussion on the human well-being.*

Lecturer	*Marco Gobbetti*
Scientific sector of the lecturer	AGR/16 Agriculture Microbiology
Teaching language	English
Office hours	Monday to Thursday by appointment
Teaching assistant *(if any)*	

Office hours	
List of topics covered	*The course will cover the following topics:* *- General Microbiology* *- High throughput sequencing* *- Microbiome conditioning* *- metabolome characterization*
Teaching format	*The course consists of lectures where the topics are presented by the professor. Course topics are presented at the blackboard and using electronic slides. Teaching material and additional materials are provided by the Professor at the beginning of each lectures.*

Learning outcomes	*Through the study and the application of the topics presented during lectures, students have to achieve:* *1. knowledge and understanding of the fundamentals of general microbiology;* *2. the capacity to manage the conditioning and monitoring of the human gut microbiota diversity and its repercussion on the human well-being.*
Assessment	*The assessment of the student preparation is through an written exam. The written assessment includes questions to assess the knowledge and understanding of the course topics and questions designed to assess the ability to transfer these skills to case studies.*
Assessment language	*English*
Evaluation criteria and criteria for awarding marks	*Students are asked to attend the witten exam.* *It is relevant for the exam to: master the specific language (also with respect to teaching language); prove the understanding of the topics and learning skills; evaluate and establish relationships between topics; grow specific skills in critical thinking.* *The exam mark will be assessed as follows: written exam*

Required readings	*Depending on the case studies, the professor provides the related scientific articles. The supply of the articles is done at the beginning of each lecture and corresponding to each case studies.*
Supplementary readings	