Syllabus
Course description

Course title	Computer Application in Food Sciences
Course code	44741
Scientific sector	-
Degree	Food Sciences for Innovation and Authenticity
Semester	I
Year	1°
Academic Year	2021/22
Credits	3

Total lecturing hours	30
Total lab hours	
Total exercise hours	
Attendance	Recommended
Prerequisites	Some basic knowledge on statistical analysis and the use of spreadsheet is helpful.
Course page	-

Specific educational objectives	The course gives a general overview on the use of R and MS Excel for data analysis. In particular, students will learn how to describe and analyze datasets of food interest by developing simple spreadsheets programs and scripts based on R.

Lecturer	Matteo Scampicchio, matteo.scampicchio@unibz.it
Scientific sector of the lecturer	AGR/15
Teaching language	English
Office hours	Tuesday, 18-19
List of topics covered	- Basic use of Microsoft Excel - Basic use of R - Descriptive statistic
Teaching format	Frontal lectures and exercise with PC

Learning outcomes	Knowledge and understanding - Knowledge of methods for analyzing data sets with common software like R and Excel Applying knowledge and understanding - Capacity to develop scripts and spreadsheets for summarizing the information contained in datasets with simple descriptive statistic. Making judgments - be able to judge pros and cons of different data

	analysis tools

Assessment	• Written Test based on the use of R and MS Excel applied for the resolution of common problems in food science.

Assessment language	English
Evaluation criteria and criteria for awarding marks	The test is prevalently single or multiple choice. The number of correct answer will be turned into 30 points.

Bibliografia fondamentale	Slides, scripts and spreadsheets prepared by the professor
Bibliografia consigliata	For the use of spreadsheets: - Computer application in food technology, R.P. Singh, Academic Press; For R: https://www.statmethods.net/ - R-4.1.1 for Windows - **An Introduction to R** is based on the former "Notes on R", gives an introduction to the language and how to use R for doing statistical analysis and graphics. (https://cran.r-project.org/)