# Syllabus

## Course title
Meta-omics approaches to study the food fermentations

## Course code
46028

## Scientific sector
AGR16

## Degree
PhD in Food Engineering and Biotechnology

## Semester
2

## Year
1

## Academic year
2019/2020

## Credits
3

## Modular
NO

## Total lecturing hours
30

## Total lab hours

## Total exercise hours

## Attendance

## Prerequisites

## Course page

## Specific educational objectives
The course is a deepening of the disciplinary field of food microbiology, as a characterizing course.

The aim of the course is to provide advanced knowledge on fermentation for making baked goods.

The course gives a general overview on the physiology and biochemistry of yeasts and lactic acid bacteria, which have used for making baked goods. The procedure for making a mature sourdough has supplied. A comparison between fermentations through baker’s yeast and sourdough is given with particular emphasis on the sensory, shelf life and nutritional features of baked goods.

## Lecturer
Raffaella Di Cagno
Polo Andrea

## Scientific sector of the lecturer
AGR/16

## Teaching language
English

## Office hours
From Monday to Thursday, on appointment

## Teaching assistant (if any)

## Office hours

## List of topics covered
- Introduction to omics approaches;
- Metagenomics and case studies;
- Phenomics (Use of Omnilog microarray) and case studies;
- Proteomics and case studies;
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