COURSE DETAIL

FOOD FERMENTATION
Country Netherlands
Host Institution Wageningen University and Research Center
Program(s) Wageningen University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 101
UCEAP Course Suffix
UCEAP Official Title FOOD FERMENTATION
UCEAP Transcript Title FOOD FERMENTATION
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description
This course is a study of the theory behind the use of microorganisms in food fermentation processes. Topics covered include the theoretical background of functional microorganisms (lactic acid bacteria, yeasts, and molds) and their behaviors as fermentation starters, the process engineering aspects of the formation of biomass and products, and modern biotechnology in food fermentation. Students also learn about applied aspects (commodity technologies) and skills (laboratory fermentations, interaction between theory and practice). The practical class consists of modules about beer and dairy fermentation, and computer aided simulations which give insight into important parameters and orders of magnitude. After successful completion of this course, students are able to understand the role of fermentation microorganisms in major food fermentations; understand the biochemical activities and conversions that take place during fermentations and their impact on quality and safety; carry out simple calculations on stoichiometry, microbial growth, and transfer processes during food fermentations; and carry out food fermentation processes and monitor their progress by measurements and analyses.

Language(s) of Instruction
English

Host Institution Course Number
FHM-21806

Host Institution Course Title
FOOD FERMENTATION

Host Institution Campus
Food Technology

Host Institution Faculty

Host Institution Degree

Host Institution Department
Food Microbiology

Print