COURSE DETAIL

ADVANCED FOOD CHEMISTRY
Country Netherlands
Host Institution Wageningen University and Research Center
Program(s) Wageningen University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Chemistry Agricultural Sciences
UCEAP Course Number 143
UCEAP Course Suffix
UCEAP Official Title ADVANCED FOOD CHEMISTRY
UCEAP Transcript Title ADVANCED FOOD CHEM
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

Knowledge of the chemical composition and properties of food is of primary importance to ensure product quality, safety, and stability. In the lectures of this course, the effects of processing and storage conditions on the chemical composition of the major food constituents (lipids, carbohydrates, and proteins) and phenolic compounds are discussed. Examples are the modification of lipids and the importance of lipid refining, modification of polysaccharides to optimize their properties, reactivity (e.g. oxidation) of phenolic compounds, and stability & chemical reactivity of proteins. The course focuses on the occurrence and reactivity of these compounds in different food products and raw materials, the analysis of these compounds and their reaction products, and the effect of reactions during storage and processing on the chemical composition and properties of raw materials and food products. Information discussed during the lectures is applied in tutorials, digital case studies, and a practical in which students design the experiment.

Language(s) of Instruction
English

Host Institution Course Number
FCH30806

Host Institution Course Title
ADVANCED FOOD CHEMISTRY

Host Institution Course Details
https://wur.osiris-student.nl/onderwijscatalogus/extern/cursus

Host Institution Campus
Wageningen University and Research Center

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2023-2024

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