Food Chemistry (O000103)

Course Specifications

Valid as from the academic year 2016-2017

Lecturers in academic year 2016-2017
Cirkovic Velickovic, Tanja

Course offerings and teaching methods in academic year 2016-2017
A (semester 1)
- lecture: 22.5 h
- practicum: 22.5 h

Offered in the following programmes in 2016-2017
- Bachelor of Science in Food Technology
  - credits: 5
  - offering: A

Teaching languages
- English

Keywords
- Food, Agricultural raw materials, Composition, Properties, Degradation reactions, Nutritional value, Food safety

Position of the course
- Food chemistry deals with the study of the chemical, biochemical and physicochemical processes involved in agricultural raw materials and in foodstuffs, and during the transformation of agricultural raw materials into derived products. This knowledge is essential for students who want to specialize further as a MSc in Food Technology or MSc in Food Science and Nutrition.

Contents
1. Introduction and definitions
2. Water
3. Proteins
4. Enzymes
5. Lipids
6. Carbohydrates
7. Vitamins
8. Pigments
9. Other constituents
10. Additives, residues and contaminants

Initial competences
- Basic knowledge of inorganic chemistry, organic chemistry and biochemistry is required.

Final competences
- The student will acquire thorough and fundamental knowledge of the chemical properties of and the chemical reactions taking place in agricultural raw materials and their derived products and basic knowledge about the chemical analysis of agricultural raw materials and their derived products.
- The student will be able to argue analytically and synthetically about chemical properties of and chemical reactions in agricultural raw materials and their derived products, to collect information about the chemical composition of agricultural raw materials and their derived products, to process this information and to report it and to practice laboratory techniques about the basic chemical analysis of agricultural raw materials and their derived products.

Conditions for credit contract

(Approved)
Access to this course unit via a credit contract is determined after successful competences assessment.

**Conditions for exam contract**
- This course unit cannot be taken via an exam contract

**Teaching methods**
- Guided self-study, lecture, practicum

**Learning materials and price**

**References**

**Course content-related study coaching**

**Evaluation methods**
- end-of-term evaluation and continuous assessment

**Examination methods in case of periodic evaluation during the first examination period**
- Written examination with open questions, written examination with multiple choice questions

**Examination methods in case of periodic evaluation during the second examination period**

**Examination methods in case of permanent evaluation**
- Participation, job performance assessment, report

**Possibilities of retake in case of permanent evaluation**
- Examination during the second examination period is possible in modified form

**Calculation of the examination mark**
- Written examination with open questions 50%
- Written examination with multiple choice questions 30%
- Participation 5%
- Report 10%
- Performance assessment 5%

(Approved)