

Faculty of Environmental Management and Agriculture

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Course title: Agricultural crop quality and food safety

ECTS credit allocation (and other scores): 2.0

Semester: spring

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 30

Course coordinator/ Department and e-mail: dr hab. Danuta Packa, Department of Plant Breeding and Seed Production, packa@uwm.edu.pl

Type of classes: classes and lectures

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Substantive content

CLASSES: Selected legal acts regulating food and feed safety. Major sources of food contamination and their impact on human health. Genotoxic and carcinogenic substances. Genetically modified foods and feeds in the EU. Labeling of products containing GMOs. Food terrorism. The main organizational aspects that influence food safety. Good practices in primary production. Students draft regulations relating to quality certification of selected food groups.

LECTURES: Crop yield and crop quality. Factors that determine the nutritional value of crops in the production of foods and feeds and the processing suitability of crops for industrial applications. Contamination of agricultural produce. Legal regulations relating to food and feed safety. Monitoring, risk assessment, toxicology analyses, determination of maximum residue levels (MRL) in food and feed. Good Agricultural Practices (GAP) for eliminating and minimizing contamination in agricultural produce. Physical availability, economic availability and quality as determinants of food safety. Basic food safety principles in agribusiness. The significance of food quality for the agricultural market. The functions, features and procedures of implementing food quality systems in agriculture.

Learning purpose: Students learn about the relations between the elements of the food chain and legal regulations concerning food safety ("from farm to fork"). Principles and procedures of food safety systems in Poland. The significance of food quality for economic efficiency.

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On completion of the study programme the graduate will gain:

Knowledge: The student has extensive knowledge about the quality and contamination of agricultural produce. The student is familiar with the concept of food safety, the impact of food quality on human health, and food safety protection measures. The student is familiar with factors that influence food quality. The student has extensive knowledge of legal regulations concerning food safety.

Skills: The student relies on various sources of information about food quality and safety. The student independently and comprehensively analyzes problems relating to food and feed safety. The student identifies and evaluates measures which are undertaken to guarantee food safety and proposes solutions for improving food quality. The student proposes effective instruments of voluntary support for food quality.



Social Competencies: The student assumes responsibility for the quality and safety of food during the entire production process. The student recognizes the need for implementing food safety strategies at all levels of management. The student recognizes the need for expanding his/her knowledge about food safety.

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Basic literature: Skrabka-Błotnicka T., Maślowski B. 2008. Bezpieczeństwo żywnościowe. UE Wrocław; Małyś J. 2008. Bezpieczeństwo żywnościowe strategiczną potrzebą ludzkości. Almamater, Warszawa; Rozporządzenie Komisji (WE) 1881/2006 ustalające najwyższe dopuszczalne poziomy niektórych zanieczyszczeń w środkach spożywczych (wersja skonsolidowana). Dz.U. L 364, 2017.

Supplementary literature: Cholewińska-Goździk K. 1996. Marketing w agrobiznesie. FAPA, Warszawa

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The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 1.24 ECTS points

Student's independent work: 0.76 ECTS points