





## **Faculty of Food Science**

## Course title / code: FOOD QUALITY AND SAFETY MANAGEMENT / 03S2O-FQASM

ECTS credit allocation (and other scores): 2

Semester: summer

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: Waldemar Dzwolak, Dairy Science and Quality Management Department, waldekdz@uwm.edu.pl

Type of classes: classes (15h) and lectures (15h)

## Substantive content

CLASSES: Developing of basic elements of the HACCP plan and selected areas of good practices (GMP/GHP - PRP/OPRP). Establishing of quality and food safety objectives. Mapping and description of processes. Developing of food defense plan. Application of selected organizational and statistical tools applied to improve the processes. Fundamentals of internal audits. Developing of procedures/instructions, plans and specifications. Food allergen management and food frauds.

LECTURES: Terms and definitions. Characterization of the food safety hazards. Control measures in food safety management. Good practices GP - prerequisite programmes (PRP) and HACCP principles. Principles of the quality management. Reguirements of ISO 22000, BRC, IFS and ISO 9001 standards. Continual improvement. Selected organizational/statistical methods and tools. Food terrorism and food defense. Developing of the FQSMS documentation. FSSC 22000 certification. Food allergen management. Process management. Salford Model in the catering and food retailing. Traceability in the food chain.

Learning purpose: Obtaining of fundamental knowledge on the food quality and safety management systems (FQSMS), including food safety hazards and control measures, prerequisite programmes PRP, the Codex HACCP principles, food fraud, food defense, continual improvement, food allergen management and documentation of the system.

On completion of the study programme the graduate will gain:

Knowledge: Basic elements of the food safety and quality management systems.

Skills: Developing, documenting, implementing and improving of selected areas of the food safety and quality management systems.

Social Competencies: Awarness of importance of social, professional, penalty and ethical responsibilities for the production of safe foodstuffs.

## Basic literature:

1) Mortimore S., Wallace C., HACCP. A Practical Approach. Third Edition, Springer, New York Heidelberg Dordrecht London, 2013 ; 2) Wallace, C.A., Sperber, W. H. and Mortimore, S.E., Food Safety for the 21st Century. Managing HACCP and Food Safety Throughout the Global Supply Chain, Wiley-Blackwell, 2018 ; 3) Oakland J.S., Oakland on Quality Management, Els.Butt.Hein., 2004 ; 4) ISO 9000, Quality management systems - Fundamentals and vocabulary, ISO, 2015 ; 5) ISO 9001, Quality management systems - Requirements, ISO, 2018 ; 6) ISO 22000, Food



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safety management systems - Requirements for any organization in the food chain, ISO, 2018 ; 7) IFS v. 6.1, IFS - Standard for Auditing Retail and Wholesaler Branded Food Products, IFS Management GmbH, 2017 ; 8) BRC v. 8, BRC Global Standard. Food Safety, BRC, 2018

Supplementary literature:

1) Oakland J.S., Total Quality Management, Els.Butt.Hein., 1995 ; 2) Dzwolak W., Practical aspects of traceability in small food businesses with implemented food safety management systems, Journal of Food Safety, 2016, 36(2), 203-213; 3) Dzwolak W., HACCP in small food businesses – the Polish experience, Food Control, 2014, 36, 132-137; 4) Dzwolak W., Documenting HACCP in a small restaurant – a practical approach, Quality Assurance and Safety of Crops & Foods, 2016 ; 5) Dzwolak W., Assessment of food allergen management in small food facilities, Food Control, 2017, 73, 323-331; 6) Dzwolak W., Developing a hazard analysis worksheet in a small food business with the application of a T-shaped matrix diagram, Food Control, 2018, 87, 180-191; 7) Dzwolak W., Assessment of HACCP plans in standardized food safety management systems – The case of small-sized Polish food businesses, Food Control, 2019, 106, 106716

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 32 (classes - 15, lectures - 15, consultations - 2)

Student's independent work: 18 (development of documentation – 15, preparing to classes – 3)