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| **STUDY PROGRAMME:** | **Professional Graduate Study Programme *Management in Agriculture*** |
| **Course:** | **QUALITY MANAGEMENT SYSTEMS**  |
| **Course code: 227983****Course status:** elective | **Semester:** **II** | **ECTS credits: 4** |
| **Course holder:**  | **Dušanka Gajdić, Ph.D., professor of professional studies** |
| **Course associates:**  | **Siniša Srečec, Ph.D., professor of professional studies** |
| **Modes of delivery:** | **Number of hours**  |
| **Lectures** | 25 |
| **Excersises** | 10 |
| **Seminars** | 5 |

**Course objectives:** Acquiring basic knowledge in the field of quality management and the specific aspects of systematic quality management in agricultural and food business systems. Students will be introduced to the fundamental characteristics of the modern quality concept, which extends beyond physical-chemical product characteristics and is primarily oriented towards meeting customer needs.

**Course content**

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|  | **Course units** | **Modes of delivery** | **Places of delivery** |
| **L** | **E** | **S** |
| I. | Term and definition of quality. Historical development of quality management concepts. Quality standardization. |  |  |  | Lecture hall |
| 1. | Conceptual definition of quality. Quality parameters. History of quality. Quality gurus. | 1 |  |  | Lecture hall |
| 2. | Phases of quality acceptance. | 1 |  |  | Lecture hall |
| 3. | Control, assurance, and management of quality. Continuous quality improvement. PDCA cycle. | 1 |  |  | Lecture hall |
| 4. | Standardization of quality. History of standardization. | 2 |  |  | Lecture hall |
| II. | Systematic quality management |  |  |  | Lecture hall |
| 5.  | Quality management systems. Fundamental principles of quality management systems. | 1 |  |  | Lecture hall |
| 6. | Implementation, certification, and accreditation of quality management systems. Certification process. | 1 | 2 |  | Lecture hall |
| 7. | Quality system audit (first, second, and third-party audits). | 1 |  |  | Lecture hall |
| 8. | Measurability of quality. Customer focus and measurement of customer satisfaction. Quality and competitiveness. | 1 |  |  | Lecture hall |
| 9. | Economic aspects of quality management. Costs of (non)quality and benefits of quality. Organizational and psychological effects of implementing a quality management system. | 1 |  |  | Lecture hall |
| 10. | Integrated quality management systems. Total Quality Management (TQM). | 1 |  |  | Lecture hall |
|  | 1. Colloquium |  |  |  |  |
| III. | Quality management in agricultural and food production |  |  |  |  |
| 11. | Legislative and technical alignment in the food sector at the international level. Food safety management in the EU: rules, tools, and practices. Codex Alimentarius, EFSA, the "Hygiene Package," RASFF. EU and Croatian legislation in the field of food safety. | 4 |  |  | Lecture hall |
| 12. | Food safety management in agricultural and food production. Food traceability. Responsibilities of food business operators. Classification of categories in the food chain. Food quality. Exercise 1 | 2 | 2 |  | Lecture hall |
| 13. | The most important international standards in the field of agricultural and food production: GlobalGap, HACCP, IFS, BRC, a series of ISO 22000 standards, ISO 9001, Halal, Kosher, etc. | 2 |  |  | Lecture hall |
| 14. | Global Gap, Product/production certification according to the GLOBALGAP standard. Key steps in the certification process. (S. Srečec, Ph.D, professor of professional studies)Exercise 4 – Key steps in the implementation process of GLOBALGAP | 2 | 2 |  | Lecture hall and outside KUAS |
| 15. | Principles of HACCP. Key steps in the certification process. (S. Srečec, Ph.D, professor of professional studies)Exercise 3 - Business case analyses with concrete examples. Create a HACCP plan | 2 | 2 |  | Lecture hall and outside KUAS |
| 16. | Food safety management system. Series of standards ISO 22000:2005. Key criteria on which the ISO 22000:2005 standard is based.Exercise 2 - Business case analyses with concrete examples. | 2 | 2 |  | Lecture hall and outside KUAS |
|  | 2. Colloquium |  |  |  |  |
| IV. | Seminars and case studies |  |  |  |  |
| 18. | Selecting topics for a seminar and data sources required for preparing a seminar or case study on the topic of "Quality Management Systems in Agricultural Production and the Food Industry" and/or critical reviews of current issues in quality management, such as:- Quality management systems in Croatian economic practice, with examples from agricultural and food companies.- Croatian experiences in quality management in agricultural and food production. Analysis of the situation, issues, and suggestions.- Standardization and quality and food safety management at the international level.- Examples of successful and unsuccessful implementations of quality and food safety management systems. Examples of non-compliance in food safety management systems.Developing a HACCP plan by identifying critical control points using a concrete example from a production or trading company. |  |  | 5 | Lecture hall and outside KUAS |
|  | **In total** | **25** | **10** | **5** |  |

**L=Lectures, E=Excersises, S=Seminars**

**Learning outcomes (LO)**

LO 1. Connect key concepts from the areas of quality, standardization, certification, and quality management systems.

LO 2. Assess the role and importance of systematic quality management in agricultural and food production in the modern world.

LO 3. Compare different quality management systems/standards in agricultural and food production, focusing on the contributions of each system.

LO 4. Identify the components of the food safety concept and the institutional and legislative framework for food safety.

LO 5. Create a HACCP plan by identifying critical control points in the production process.

LO 6. Predict the key steps in the implementation process of the GLOBALGAP system.

LO 7. Based on acquired knowledge, communicate with experts in the field of quality.

Course holder:

Dušanka Gajdić, Ph.D., professor of professional studies

Križevci, July 2024