# COURSE SYLLABUS

**1. Information about the programme**

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| 1.1 Institution of higher education | **UNIVERSITY OF ORADEA** |
| 1.2 Faculty | **ENVIRONMENTAL PROTECTION** |
| 1.3 Department of | **AGRICULTURE, HORTICULTURE** |
| 1.4 Field of study | **AGRONOMY** |
| 1.5 Level of study | **MASTER** |
| 1.6 Study programme/ Qualification | **MODERN TECHNOLOGIES IN AGRICULTURAL AND LIVESTOCK FARMS/ ENGINEER** |

**2. Discipline data:**

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| 2.1 Course name | | | | **QUALITY MANAGEMENT OF AGRICULTURAL PRODUCTS** | | | |
| 2.2 Course coordinator | | | | **GÎTEA MANUEL ALEXANDRU** | | | |
| 2.3 Seminar/ Lab/ Project coordinator | | | | **GÎTEA MANUEL ALEXANDRU** | | | |
| 2.4 Year of study | II | 2.5 Semester | 4 | 2.6 Type of assessment | Ex. | 2.7 Type of discipline | C |

(C) Compulsory; (O) Optional; (E)Elective

**3. Total time estimated** (hours of teaching per semester)

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|---|---|---|---|---|---|
| 3.1 Number of hours per week | 4 | of which: 3.2 course | 2 | 3.3 laboratory/ project | 2 |
| 3.4 Total hours in the curriculum | 40 | of which: 3.5 course | 20 | 3.6 laboratory/project | 20 |

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| Distribution of time | hours |
| Study based on course book, course materials, bibliography and notes | 70 |
| Additional documentation in the library, on specialized electronic platforms / in the field | 30 |
| Training seminars / laboratories, homework, essays, portfolios and essays | 50 |
| Tutoring | 5 |
| Examinations | 5 |
| Other activities..... | - |

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| **3.7 Total hours of private study** | **160** |
| **3.9 Total hours per semester** | **200** |
| **3.10 Number of credits** | **8** |

**4. Prerequisites** (where applicable)

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| 4.1 curriculum | Mathematics, Agricultural economics, Accounting |
| 4.2 competences | Knowledge of mathematical calculation and statistics notions |

**5. Conditions** (where applicable)

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| 5.1. for the course | -Presentation, video-projector, computer, boards. |
| 5.2. for the laboratory | - Equipment needed for seminar dynamics;<br>- Preparation of the paper, knowledge of the notions contained in the seminar paper to be performed (synthesis material);<br>- Carrying out all seminar works. |

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| **6. Specific skills acquired** |

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| Professional skills | C6 Use of advanced methods and tools to ensure the quality and traceability of agricultural products<br>C4.1 Identify new methods and techniques for investigating the biological properties and agronomic and ecological value of some plant species and / or local populations, as potential alternatives for food, feed and industry<br>C6.5 Elaboration of methodologies for qualitative evaluation of agricultural products and of the mechanisms necessary to ensure the traceability of agricultural products |
| Transversal competences | CT1 Performing one's own attributions with professionalism and rigor and making specific decisions for teamwork in accordance with deontological values and principles<br>CT3 Objective self-assessment of the need for continuous professional training in order to adapt professional competencies to the dynamics of the field and the demands of the labour market: learning new methods and techniques through continuous learning |

**7. Course objectives** (based on the grid of the skills acquired)

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| 7.1 The overall objective of the course | The main objective of Quality management of agricultural products is to develop a scientifically-based methodology for implementing the quality system, which takes into account the resources for carrying out these strategies and identifying a method of formulating this quality strategy for agricultural products |
| 7.2 Specific objectives | Designing a business plan based on a concrete feasibility study, knowledge of quality standards of agricultural products. |

**8. Contents ***

| 8.1 Course | Teaching methods | No. of hours / Comments |
|---|---|---|
| 1. Quality management system. Definitions, basic concepts and characteristics of quality | Presentation, video-projector, computer, boards | 2 |
| 2. Principles, functions, approaches and strategies in quality management | Presentation, video-projector, computer, boards | 2 |
| 3. Cereals, dried legumes and products resulting from their processing | Presentation, video-projector, computer, boards | 2 |
| 4. Vegetables, fruits and products resulting from their processing | Presentation, video-projector, computer, boards | 2 |
| 5**.** Sugar products and their quality | Presentation, video-projector, computer, boards | 2 |
| 6. Taste products and their quality | Presentation, video-projector, computer, boards | 2 |
| 7. Food fats and their quality | Presentation, video-projector, computer, boards | 2 |
| 8. Meat and meat products | Presentation, video-projector, computer, boards | 2 |
| 9. Milk and dairy products | Presentation, video-projector, computer, boards | 2 |
| 10. Commercial quality of eggs, fish and fish products, food concentrates | Presentation, video-projector, computer, | 2 |

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|---|---|---|
| | boards | |
| 11. Stability of food | Presentation, video-projector, computer, boards | 2 |
| 12. Food preservation | Presentation, video-projector, computer, boards | 2 |
| 13. Preservation and guarantee of food quality | Presentation, video-projector, computer, boards | 2 |
| 14. Food packaging and labelling | Presentation, video-projector, computer, boards | 2 |


Bibliography

1. Cecilia Pop, Ducu □tef, Mircea Pop – *Managementul calită□ii alimentelor*, vol. 1, Edict Production Ia□i, 2009
2. Cecilia Pop, Ducu □tef, Mircea Pop – *Managementul calită□ii alimentelor*, vol. 2, Edict Production Ia□i, 2009
3. Constantin Oprean, Claudiu Vasile Kifor,Octavian Suciu - *Managementul integrat al calității*, Ed.Universității ,,Lucian Blaga" Sibiu, 2005;
4. Andrei Victor - *Managementul asigurării calității, principii, concepte, politici şi instrumente*, Ed.Infarom, 2008;
5. Ioan Csösz, Sabin Chiş - *Managementul producției agroalimentare*, Ed.Orizonturi universitare Timişoara, 2005;
6. Dinu Gavrilescu, Daniela Giurcă - *Economie agroalimentară*, Ed. Expert, 2000;
7. Margareta Oancea - *Managementul gestiunea economică şi strategia unităților agricole*, Ed. Ceres, 2007.


| **8.2 Laboratory** | Teaching methods | |
|---|---|---|
| 1.Properties of food goods. Psychosensory properties | Presentation, video-projector, computer, boards | 2 |
| 2. Properties of food goods. Physical properties | Presentation, video-projector, computer, boards | 2 |
| 3. Properties of food goods. Physical properties | Presentation, video-projector, computer, boards | 2 |
| 4. Properties of food goods. Chemical, technological, biological and aesthetic properties | Presentation, video-projector, computer, boards | 2 |
| 5. Determining the quality of food goods. Physical and physico-chemical methods | Presentation, video-projector, computer, boards | 2 |
| 6. Determining the quality of food goods. Chemical and microbiological methods | Presentation, video-projector, computer, boards | 2 |
| 7. The chemical composition of food products and its role in quality assurance<br>Water and its role in determining the quality of food products | Presentation, video-projector, computer, boards | 2 |
| 8. The chemical composition of food and its role in quality assurance<br>Mineral substances | Presentation, video-projector, computer, boards | 2 |
| 9. The chemical composition of food and its role in quality assurance<br>Nitrogenous substances | Presentation, video-projector, computer, boards | 2 |
| 10. The chemical composition of food and its role in quality assurance | Presentation, video-projector, computer, boards | 2 |

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|---|---|---|
| Lipids | | |
| 11. The chemical composition of food and its role in quality assurance<br>Carbohydrates | Presentation, video-projector, computer, boards | 2 |
| 12. The chemical composition of food and its role in quality assurance<br>Vitamins | Presentation, video-projector, computer, boards | 2 |
| 13. The chemical composition of food and its role in quality assurance<br>Organic acids | Presentation, video-projector, computer, boards | 2 |
| 14. The chemical composition of food and its role in quality assurance<br>Enzymes and other components | Presentation, video-projector, computer, boards | 2 |
| Bibliography<br>1. Cecilia Pop, Ducu tef, Mircea Pop – *Managementul calit ii alimentelor*, vol. 1, Edict Production Ia i, 2009<br>2. Cecilia Pop, Ducu tef, Mircea Pop – *Managementul calit ii alimentelor*, vol. 2, Edict Production Ia i, 2009<br>3. Constantin Oprean, Claudiu Vasile Kifor,Octavian Suciu - *Managementul integrat al calităţii*, Ed.Universităţii ,,Lucian Blaga" Sibiu, 2005;<br>4. Andrei Victor - *Managementul asigurării calităţii, principii, concepte, politici şi instrumente*, Ed.Infarom,2008;<br>5. Ioan Csösz, Sabin Chiş - *Managementul producţiei agroalimentare*, Ed.Orizonturi universitare Timişoara, 2005;<br>6. Dinu Gavrilescu, Daniela Giurcă - *Economie agroalimentară*, Ed. Expert, 2000;<br>7. Margareta Oancea - *Managementul gestiunea economică şi strategia unităţilor agricolre*, Ed. Ceres, 2007. | | |
| 8.4 Project | | |

**9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the programme**

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| The content of the discipline is adapted and meets the requirements of the labour market, being agreed by social partners, trade associations and employers in the field related to the license program. The content of the discipline is found in the curriculum of the specialization Modern technologies in agricultural and livestock farms as well as in other universities in Romania, which have accredited this specialization. |

**10. Evaluation**

| Type of activity | 10.1 Evaluation criteria | 10.2 Evaluation methods | 10.3 Share in the final grade |
|---|---|---|---|
| 10.4 Course | For grade 5, all subjects must be treated to minimum standards<br>For grade 10, all subjects must be treated to the highest standards | Oral exam | 70% |
| 10.5 Seminar | | | |
| 10.6 Laboratory | For grade 5, the student must answer correctly to at least 50% of the questions<br>For grade 10, the student must answer correctly to 100% of the questions. | The student will be evaluated through a multiple-choice test, including questions from all the subjects covered. | 30% |
| 10.7 Project | | | |
| 10. 8. Minimum performance standard: Designing strategies for the development of integrated systems of sustainable management of agricultural production risks. | | | |

| Date of submission | Course coordinator/project | Seminar coordinator |
|---|---|---|
| 01.10.2020 | Lecturer Gîtea Manuel Alexandru<br>E-mail: giteamanuel@yahoo.com | Lecturer Gîtea Manuel Alexandru<br>E-mail: giteamanuel@yahoo.com |

Date of approval in the department

Head of the department
PhD. Prof. Eng. Bandici Gheorghe Emil

07.10.2020

Dean
PhD. Prof. Eng Cheregi Ioan