



# UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ CLUJ-NAPOCA

Calea Mănăstur 3-5, 400372, Cluj-Napoca

Tel: 0264-596.384, Fax: 0264-593.792

www.usamvcluj.ro

Nr. \_\_\_\_\_ din \_\_\_\_\_

Code USAMV 0704010102

## COURSE DESCRIPTION

### 1. General data

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| 1.1. Higher Education Institution  | Universitatea de Științe Agricole și Medicină Veterinară din Cluj-Napoca |
| 1.2. Faculty                       | Food Science and Technology                                              |
| 1.3. Department                    | Food Engineering                                                         |
| 1.4. Study field                   | Food Engineering                                                         |
| 1.5. Study level <sup>1)</sup>     | Master (MSc)                                                             |
| 1.6. Specialization/ Study Program | Food Quality Management                                                  |
| 1.7. Teaching Form                 | Full time                                                                |

### 2. Course Characteristics

|                                                     |                                                    |               |   |                         |              |                    |                                  |
|-----------------------------------------------------|----------------------------------------------------|---------------|---|-------------------------|--------------|--------------------|----------------------------------|
| 2.1. Name of the course                             | Techno-managerial principles in the agrifood chain |               |   |                         |              |                    |                                  |
| 2.2. Course leader                                  | Prof. PhD. Carmen Socaciu                          |               |   |                         |              |                    |                                  |
| 2.3. Coordinator of the laboratory/seminar activity | Prof. PhD. Carmen Socaciu                          |               |   |                         |              |                    |                                  |
| 2.4. Year of study                                  | I                                                  | 2.5. Semester | 1 | 2.6. Type of Evaluation | Continuously | 2.7. Course regime | Content <sup>2</sup>             |
|                                                     |                                                    |               |   |                         |              |                    | Level of compulsory <sup>3</sup> |
|                                                     |                                                    |               |   |                         |              |                    | DF                               |
|                                                     |                                                    |               |   |                         |              |                    | DI                               |

### 3. Total estimated time (hours/semester for the teaching activities)

|                                                                                          |     |                            |    |                                   |     |
|------------------------------------------------------------------------------------------|-----|----------------------------|----|-----------------------------------|-----|
| 3.1. Number of hours/week– frequency form                                                | 3   | of which care: 3.2. course | 2  | 3.3. seminar/ laboratory/ project | 2   |
| 3.4. Total hours in the curricula                                                        | 42  | Of which: 3.5. course      | 28 | 3.6. seminar/laboratory           | 14  |
| Distribution of time                                                                     |     |                            |    |                                   | hrs |
| 3.4.1. Study based on handbook, notes, bibliography                                      |     |                            |    |                                   | 30  |
| 3.4.2. Extra documentation in the library, on specific electronic platforms and on field |     |                            |    |                                   | 38  |
| 3.4.3. Prepare the seminars / laboratories / projects, theme, essays, reports, portfolio |     |                            |    |                                   | 30  |
| 3.4.4. Tutorial                                                                          |     |                            |    |                                   | 30  |
| 3.4.5. Examination                                                                       |     |                            |    |                                   | 10  |
| 3.4.6. Other activities                                                                  |     |                            |    |                                   | 30  |
| 3.7. Total hours of individual study                                                     | 168 |                            |    |                                   |     |
| 3.8. Total hours per semester                                                            | 210 |                            |    |                                   |     |
| 3.9. Number of ECTS <sup>4</sup>                                                         | 7   |                            |    |                                   |     |

### 4. Pre-conditions (where is the case)

|                     |                                    |
|---------------------|------------------------------------|
| 4.1. of curriculum  | Food chemistry                     |
| 4.2. of competences | Food chemistry, Food Biochemistry. |

### 5. Conditions (where is the case)

|                            |                                                                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.1. of course development | The course is interactive, all students can address questions and to point out their suggestions regarding the topic discussed. A specific discipline will be considered and respected for the timetable of course. |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                                                |                                                                                                                                                                                                                                                                                           |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.2. of seminar/laboratory/project development | It is compulsory for the consultancy received by the textbook and the teaching assistant, each student can have its own individual activity to find documentation and to find appropriate topics for its project.<br>The participation in seminars and project development is compulsory. |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 6. Specific acquired competences

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Professional competences<br>Competențe profesionale | Main concepts related to the integration of technology and management in the agrifood chain are developed and discussed.<br>The technological "block" is developing specific process related units ( from raw material to final product) while the management block describe the role of design-control-assurance-improvement in the "house of quality"                                                                                                                          |
| Transversal competences                             | Each student has the opportunity to find information given by the course leader, from electronic databases or websites of the Wageningen university ( the collaboration university at the same MSc program_ coordinated by prof. Luning). Competences can be obtained also from their individual search on a specific topic, looking to google scholar, EBSCO database or other browsers related to the topic of Food Quality, Food Safety, Food Quality management, HACCP, etc. |

## 7. Subject Objectives (as a result of the specific acquired competences)

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1. Subject general objectives | Description of the main features of Food Quality management considering the technological block and the management block ( design-control-improvement-assurance)<br>A special<br>A special focus is devoted to the Quality policy and strategy<br>An individual project based on a <i>Design of a Product</i> or the <i>Design of a Process</i> is required of each student, as an individual performance. |
| 7.2. Specific objectives        | Quality Management (TFQM)<br>Quality design<br>Quality control<br>Quality Improvement<br>Quality Policy and business strategy<br>It is stimulated the analytical thinking, efficiency in the knowledge acquirement, motivation and perseverance, responsibility for results.                                                                                                                               |

## 8. Content

| 8.1.COURSE<br>Number of hours – 28 | Methods of teaching                                                                                                                                    | Observations |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                    | Lectures                                                                                                                                               | 1 lecture    |
| Quality management                 | Management functions and decision making factors<br>Management functions<br>Quality management planning and control<br>Quality improvement and leading | C-4 (14,28%) |
| Quality design                     | Definition, concepts and characteristics<br>Design process<br>Design and business performance<br>Customer oriented design management                   | C-8 (28,56%) |
| Quality control                    | The quality control process in the agrifood production                                                                                                 | C-8 (28,56%) |



## UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ CLUJ-NAPOCA

Calea Mănăstur 3-5, 400372, Cluj-Napoca

Tel: 0264-596.384, Fax: 0264-593.792

www.usamvcluj.ro

|                                      |                                                                                                                                                                                 |                     |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                                      | Technological variables in the control of agrifood<br>Quality control and business performance<br>Supply/production/distribution Control                                        |                     |
| Quality Improvement                  | Definitions and objectives of improvement ( Plan-do-act-check)<br>Quality improvement tools<br>Basic conditions for Quality improvement<br>Organisational adaptation and change | C-4 (14,28%)        |
| Quality Policy and business strategy | Strategic management<br>Strategic alternatives<br>Benchmarking<br>Quality policy                                                                                                | C-4 (14,28%)        |
|                                      |                                                                                                                                                                                 | <b>C-28 ( 100%)</b> |

|                                                     |                                                                                                                                                                                       |                    |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>8.2. SEMINARS</b><br><b>Number of hours – 14</b> |                                                                                                                                                                                       |                    |
| Quality management                                  | Quiz questions and case studies related to quality management<br>Analysis of data obtained from literature and databases                                                              | S-2 ( 14,28 %)     |
| Quality design                                      | Quiz questions and case studies related to quality design<br>Development of a template for a Design of product/process                                                                | S-3 (21,42%)       |
| Quality control                                     | Quiz questions and case studies related to quality control<br>Analysis of data obtained from literature and databases                                                                 | S-3 (21,42%)       |
| Quality Improvement                                 | Quiz questions and case studies related to quality Improvement<br>Analysis of data obtained from literature and databases                                                             | S-3 (21,42%)       |
| Quality Policy and business strategy                | Quiz questions and case studies related to management systems, quality policy and business strategy<br>Discussions related to individual project description, content and development | S-3 (21,42%)       |
|                                                     |                                                                                                                                                                                       | <b>S-14( 100%)</b> |

### *Bibliography (Compulsory)*

1. Luning P.A., W.J.Marcelis, W.M.F.Jongen, Food Quality management, a techno-managerial approach, Wageningen Pres, 2002
2. Luning P.A., W.J.Marcelis, W.M.F.Jongen, Food Quality management, a techno-managerial approach (trad. Romana Managementul calității alimentelor, trad by Ovidiu Nicu Pentelescu), Casa Cărții de Știință, Cluj-Napoca 2008
3. **Socaciu C.** and Stanila A., Nitrates In Food, Health And The Environment in: Case studies in food safety and Environmental health (Ed. P. Ho, M.M.C.Vieira), , ISEKI Publ. Ed. Kristberg Kristbergsson, Springer, NY. 16-25, **2007**, p.16-25, ISBN 978-0-387-33514-8
4. **Socaciu C.**, Analysis Of Chemical Food Safety, In: Safety in the Agrifood chain, (eds. Luning P., Devlieghere F., Verhe R.), Wageningen Academic Publ., **2006**, p. 525-559. ISBN 9076998779

### *Optional bibliography:*

1. Froman B., Manualul Calității, Ed. Tehnică, București, 1998.
2. Paraschivescu V., Asigurarea, Certificarea Și Controlul Calității Mărfurilor, Ed. Neuron, Focșani, 1994.
3. Scorei R. Și Colab., Ghid Practic Pentru Industria Agro-Alimentară, Ed. Aius, Craiova 1998.



4. \*\*\* Managementul Calității Și Asigurarea Calității, Colecție de Standarde, Ed. Tehnică, București, 1996.

**9. Correlations between the subject against the expectations of the epistemic community representatives, of the professional associations and employers' representatives in the domain**

The course, laboratory and seminars are correlated and complementary in information and giving abilities to work independently and to make a personalized project on Risk assessment. The competences and capabilities can be valorized in different responsibilities such as managers of Food control agencies, Health and Hygiene departments in universities or Public Departments, as well in different companies specialized in the Food Industry.

**10. Evaluation**

| Type of activity                             | 10.1. Evaluation criteria                                                                                                                                                                         | 10.2. Evaluation methods                                                                                                                             | 10.3. Percent of the final grade |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <b>10.4. Course</b>                          | Classification and description of main categories of quality assessment procedures: Quality design, Quality control, Quality Improvement, Quality assurance, Quality Policy and business strategy | Presence at min 50% of direct hours gives a mark of 10                                                                                               | 20%                              |
| <b>10.5. Seminar</b>                         | Understanding the main objectives of Techno-managerial concepts: Quality design, Quality control, Quality assurance, Quality Improvement, Quality Policy and business strategy                    | Project submission and presentation (.ppt)(P)<br>Final marks are determined by the formula:<br>$NF = 0.8 \times P + 0.2 \times \text{presence mark}$ | 80%                              |
| <b>10.6. Minimal standard of performance</b> |                                                                                                                                                                                                   |                                                                                                                                                      |                                  |

<sup>1</sup> Level of study- to be chosen one of the following - Bachelor/Postgraduate/Doctoral

<sup>2</sup> Course regime (content) – for bachelor level it will be chosen one of the following - **DF** (fundamental subject), **DD** (subject in the domain), **DS** (specific subject), **DC** (complementary subject).

<sup>3</sup> Course regime (compulsory level) - to be chosen one of the following - **DI** (compulsory subject), **DO** (optional subject), **DFac** (facultative subject)

<sup>4</sup> One ECTS is equivalent with 25-30 hours of study (didactical and individual study).

Filled in on  
8.09.2021

Course coordinator  
Prof. PhD. Carmen SOCACIU

Seminar coordinator  
Prof. PhD. Carmen SOCACIU

Subject coordinator  
Prof. PhD. Carmen SOCACIU

Approved by the  
Department on  
22.09.2021



**UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ CLUJ-NAPOCA**

Calea Mănăstur 3-5, 400372, Cluj-Napoca

Tel: 0264-596.384, Fax: 0264-593.792

[www.usamvcluj.ro](http://www.usamvcluj.ro)

Head of the Department  
Prof. PhD. Ramona SUHAROSCHI

Approved by the Faculty  
Council on  
28.09.2021

Dean  
Prof. PhD. Elena MUDURA