

UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ CLUJ-NAPOCA

Calea Mănăștur 3-5, 400372, Cluj-Napoca Tel: 0264-596.384, Fax: 0264-593.792

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| No. | of | |
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| | | |

USAMV form CN-0701040114

SUBJECT OUTLINE

1. Information on the programme

| 1.1. Higher education institution | University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca |
|-------------------------------------|--|
| 1.2. Faculty | Faculty of Food Science and Technology |
| 1.3. Department | Food Engineering |
| 1.4. Field of study | Food Engineering |
| 1.5.Education level | Bachelor |
| 1.6.Specialization/ Study programme | Technology of Agricultural Products Processing (TPPA) |
| 1.7. Form of education | Full time |

2. Information on the discipline

| 2.1. Name of the | | Practice for the diploma project | | | | | | |
|---|----|----------------------------------|----------|-----------------------------|------------|-------------------|-----------------------------|----|
| discipline | | | | | | | | |
| 2.2. Course coordinator | | | | | | | | |
| 2.3. Seminar/ laboratory/ project coordinator | | | Borşa An | Borşa Andrei, PhD, Lecturer | | | | |
| 2.4. Year of study | IV | 2.5. Semester | VIII | 2.6. Type of | | 2.7. | Content ² | DS |
| | | | | evaluation | continuous | Discipline status | Compulsoriness ³ | DI |

3. Total estimated time (teaching hours per semester)

| 3.1. Hours per week – full time programme | 4.28 | out of which: 3.2. lecture | - | 3.3. seminar/ laboratory/ project | 4.28 |
|---|------|----------------------------|---|-----------------------------------|-------|
| 3.4.Total number of hours in the curriculum | 60 | Out of which: 3.5.lecture | - | 3.6.seminar/laboratory | 60 |
| Distribution of the time allotted | | | | | hours |
| 3.4.1. Study based on book, textbook, bibliography and notes | | | | 2 | |
| 3.4.2. Additional documentation in the library, specialized electronic platforms and field | | | | 7 | |
| 3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays | | | | 2 | |
| 3.4.4.Tutorials | | | 2 | | |
| 3.4.5.Examinations | | | | 2 | |
| 3.4.6. Other activities | | | | 0 | |
| A = m . 11 | | | | | |

| 3.7. Total hours of individual study | 15 |
|--------------------------------------|----|
| 3.8. Total hours per semester | 75 |
| 3.9. Number of credits ⁴ | 3 |

4. Prerequisites (is applicable)

| 4.1. curriculum-related | Operations and machinery in the food industry, raw vegetable and animal materials |
|-------------------------|---|
| 4.2. skills-related | The student must have general knowledge of food engineering |

5. Conditions (if applicable)

| 5.1. for the lecture | During practical activities, the students will present themselves in the pilot stations | |
|-----------------------------------|---|--|
| | or at the economic agents in the scheduled period with the results of the medical | |
| | analyzes according to the sanitary-veterinary norms in force and will carry out | |
| | activities with the raw and auxiliary materials provided. The use of protective | |
| | equipment such as a robe and cap is mandatory during practical activities. | |
| 5.2. for the seminar/ laboratory/ | During practical works, each student will develop an individual activity with | |



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| project | laboratory materials (made available in the book that describes the laboratory |
|---------|---|
| | work). Academic discipline is imposed throughout the course of practical works. |

6. Specific competences acquired

| Professional competences | C2.3. Application of basic engineering principles and methods for solving technological problems in the agrifood chain and for the design of new food products C3.2. Explain and interpret the principles and methods used in technological processes in the food chain C3.3 Monitor and control technological processes in the food industry, identify abnormal situations and propose solutions |
|--------------------------|---|
| Transversal | CT1 Apply strategies of perseverance, rigor, efficiency and responsibility at work, punctuality and taking responsibility for the results of personal activity, creativity, common sense, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the code of professional ethics in the food field CT3 Efficient use of various ways and techniques of learning - training for the acquisition of bibliographic and electronic database information both in Romanian and in an international language, as well as assessing the need and usefulness of extrinsic and intrinsic motivations of continuing education |

7. Course objectives (based on the list of competences acquired)

| 7.1. Overall course objective | To ensure the consolidation of the theoretical knowledge and the development of the communication and organization skills of the graduate of the bachelor cycle in accordance with the principles of food technologies, to solve engineering and technological problems and to facilitate their insertion on the labor market. |
|-------------------------------|--|
| 7.2. Specific objectives | To acquire the knowledge regarding the legislation in force and the instructions for safety and health at work specific to the food practice To understand the role and the way of organization, development and evaluation of the internship for the elaboration of the Bachelor Diploma and to use efficiently and planned the various ways and techniques of learning To acquire general knowledge regarding the management of production processes and the management of production quality. |

8. Content

| 8.1.LECTURE Number of hours – | Teaching methods | Notes - |
|---|--|--|
| 8.2. PRACTICAL WORK | Theoretical presentation of | 1 lab work |
| Number of hours –60: | practical works | (2 hours / work) |
| Technological practice in individual system in a profile unit or in a pilot station - documentation for the diploma project | | 15 individual practical works = 30 hours |
| Opportunity and justification of the chosen topic | Explanation, conversation | 1 seminar = 2 hours |
| Documentary study | Explanation, conversation | 1 seminar = 2 hours |
| The final choice of technological manufacturing schemes with detailing the parameters | Explanation, problematization conversation, case study | 1 seminar = 2 hours |
| Technological calculation | Explanation, problematization conversation, case study | 3 seminars = 6 hours |
| Equipment calculation | Explanation, conversation | 2 seminars = 4 hours |
| Quality and hygiene management in the designed section | Explanation, problematization conversation, case study | 2 seminars = 4 hours |
| Economic calculation | Explanation, problematization conversation, case study | 2 seminars = 4 hours |
| The graphic part (at least the sketch of the designed | Explanation, conversation | 3 seminars = 6 hours |



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| section and the sketch of its general location; scores are | | |
|---|-------------------------------|--|
| awarded additional for all utility diagrams, diagram | | |
| operations, equipment schedule, equipment | | |
| representations and so on) | | |
| Compulsory bibliography: | | |
| All subjects in the curriculum are specific to the chosen top | pic. | |
| Technology-specific guidance / design notes. | | |
| Optional bibliography: | | |
| C. Banu s.a- Manualul inginerului de industrie alimentară, | Editura Tehnică, vol. I si II | |

9. Corroborating the course content with the expectations of the epistemic community representatives, of the professional associations and of the relevant stakeholders in the corresponding field

The content of the discipline is in accordance with the requests of specific national professional associations

10. Assessment

| Type of activity | 10.1. Assessment criteria | 10.2. Assessment methods | 10.3. Percentage of the final grade | |
|--|---|--|-------------------------------------|--|
| 10.4. Lecture | - | - | | |
| 10.5. Seminar/Laboratory | Observance of working procedures, verification of results | Presentation of the results related to the license project | 100% | |
| 10.6. Minimum performance standards | | | | |
| Completion of experimental activities related to the bachelor project. | | | | |

- ¹ Level of study- to be chosen one of the following Bachelor/Post graduate/Doctoral
- ² 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).
- Course regime (compulsory level) to be chosen one of the following **DI** (compulsory subject), **DO** (optional subject), **DFac** (facultative subject)
- One ECTS is equivalent with 25 hours of study (didactical and individual study).

| Filled in on 06.09.2021 | Course coordinator Laboratory work/seminar Borşa Andrei, PhD, | | |
|-------------------------|--|-------------------|--|
| | •••••• | 47 | |
| | Subject co | ordinator A Son 9 | |
| | Mirela Jimborean, PhD, Assoc. Proffesor | | |

Approved by the Department on 22.09,2021

Approved by the Faculty Council on 28.09.2021 Head of the Department Sevastita Muste PhD, Professor

Dean Elena Mudura PhD, Professor