



No. \_\_\_\_\_ of \_\_\_\_\_

USAMV form 0109020102

## 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                         | Agriculture  |
| 1.3. Department                      | II Plant culture   |
| 1.4. Field of study                  | Agronomy   |
| 1.5. Cycle of study <sup>1</sup>     | Master   |
| 1.6. Specialization/ Study programme | Management of natural and agrotouristic resources                          |
| 1.7. Form of education               | Full time  |

### 2. Information on the discipline

|   |    |                  |   |                           |            |                        |                             |    |
|---|----|------------------|---|---------------------------|------------|------------------------|-----------------------------|----|
| 2.1. Discipline name                          |    | Animal nutrition |   |                           |            |                        |                             |    |
| 2.2. Course coordinator                       |    |                  |   | Phd. Ing. Stetca Gheorghe |            |                        |                             |    |
| 2.3. Seminar/ laboratory/ project coordinator |    |                  |   | Phd. Ing. Stetca Gheorghe |            |                        |                             |    |
| 2.4. Year of study                            | II | 2.5. Semester    | I | 2.6. Evaluation type      | continuous | 2.7. Discipline status | Content <sup>2</sup>        | DD |
|   |    |                  |   |                           |            |                        | Compulsoriness <sup>3</sup> | DI |

### 3. Total estimated time (teaching hours per semester)

|   |     |                            |    |                                   |       |
|---|-----|----------------------------|----|-----------------------------------|-------|
| 3.1. Hours per week - full time programme   | 2   | out of which: 3.2. lecture | 1  | 3.3. seminar/ laboratory/ project | 1     |
| 3.4. Total number of hours in the curriculum  | 28  | out of which: 3.5. lecture | 14 | 3.6. seminar/laboratory           | 14    |
| Distribution of the time allotted   |     |                            |    |                                   | hours |
| 3.4.1. Study based on books, textbooks, bibliography and notes                              |     |                            |    |                                   | 62    |
| 3.4.2. Additional documentation in the library, electronic platforms and field experiences  |     |                            |    |                                   | 50    |
| 3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays |     |                            |    |                                   | 40    |
| 3.4.4. Tutorials  |     |                            |    |                                   | 20    |
| 3.4.5. Examinations   |     |                            |    |                                   | 10    |
| 3.4.6. Other activities   |     |                            |    |                                   |       |
| 3.7. Total hours of individual study  | 182 |                            |    |                                   |       |
| 3.8. Total hours per semester   | 210 |                            |    |                                   |       |
| 3.9. Number of credits <sup>4</sup>   | 7   |                            |    |                                   |       |

### 4. Prerequisites (if applicable)

|                         |   |
|-------------------------|---|
| 4.1. curriculum-related | Agro-technical, Plant culture, General animal husbandry |
| 4.2. skills-related     | Biochemistry, Ecological Technologies                   |

### 5. Conditions (if applicable)

|   |                    |
|---|--------------------|
| 5.1. for the course                       | It's not necessary |
| 5.2. for the seminar/ laboratory/ project | It's not necessary |

Note: In the case of online teaching, the teaching methods are adapted to the online conditions and platforms used.

## 6. Cumulated specific competences

|                          |  |
|--------------------------|--|
| Professional competences | <p>The graduate gains new skills that widen his professional area:</p> <ul style="list-style-type: none"> <li>- Consultant in the field of ecological zootechnics,</li> <li>- Inspector in inspection and certification bodies,</li> <li>- Researcher or teacher in the field of organic farming, including obtaining food products in conditions of environmental protection.</li> </ul>  |
| Transversal competences  | <p>The discipline provides master's students with thorough, theoretical and practical knowledge about the ecological system for animal husbandry, the relationship between zootechnical biodiversity and food heritage, specifically for biosecurity, for the management of health status in the ecological breeding system, the characteristics of ecological food processing, the ecological requirements regarding the norms by species and also product chain.</p> <p>The discipline initiates, forms and completes (strengthens) affective relationships in relation to the wealth of natural species and varieties, develops new opinions and behaviors towards animals.</p> |

## 7. Discipline objectives (based on the cumulated specific competences)

|                          |   |
|--------------------------|---|
| 7.1. General objective   | <p>Knowing the specificity of animal breeding in the ecological system.</p> <p>Presentation of the conditions in which the conversion to the ecological zootechnics is made, the requirements regarding the feeding, sheltering, welfare of animals in the ecological system of breeding.</p> <p>The relationship between the ecological breeding system and the quality of the certified animal products.</p> <p>Legislative regulations.</p>                    |
| 7.2. Specific objectives | <p>The discipline provides master's students with sound, theoretical and practical knowledge about the ecological system for animal husbandry, the relationship between zootechnical biodiversity and food heritage, the specificity of biodiversity, the management of health status in the ecological growth system, the characteristics of the processing of organic foods, the requirements regarding the ecological norms. by species and product chain.</p> |

## 8. Content

| 8.1. COURSE<br>Number of hours -  | Teaching methods | Observation |
|---|------------------|-------------|
| Number of hours - 14  |                  |             |
| The importance of feeding pets  | Lecture          | 2 lecture   |
| Factors influencing feed digestibility  | Lecture          | 2lecture    |
| Appreciation of the nutritional value of the fodder based on their energy content | Lecture          | 2 lecture   |
| Complex appreciation of the nutritional value of feeds and ratios                 | Lecture          | 2 lecture   |
| Feed classification   | Lecture          | 2 lecture   |
| Rational feeding of animals   | Lecture          | 2 lecture   |
| Organization of rational feeding of animals in a mountain farm                    | Lecture          | 2 lecture   |

| 8.2. PRACTICAL WORKS<br>Number of hours - | Teaching methods         | Observation |
|---|--------------------------|-------------|
| Number of hours - 28                      |                          |             |
| Feeding and feeding ratio in horses       | Theoretical presentation | 2 lab work  |
| Feed and feed ratio in sheep              |                          | 2 lab work  |
| Feed and feed ratio in pigs               |                          | 2 lab work  |
| Feed and feed ratio in birds              |                          | 2 lab work  |
| Feed and feed ratio in cattle             |                          | 2 lab work  |
| Feeding and feeding ratio in rabbits      |                          | 2 lab work  |
| Practical exam                            |                          | 1 lab work  |

### Compulsory bibliography:

Aldescu Teodora, 2003, *Importanța agriculturii ecologice, principia, obiective curente. Suport de curs pentru bioagricultori*

Aubert C., 1977, *L'agriculture, pourquoi et comment la pratiquer. Ed. Le Courier du Livre Paris*

Boboc Vioreca, 2003, *Impactul tehnologiilor de creștere și exploatare a păsărilor în sistem ecologic și posibilități de dezvoltare a pieței produselor ecologice în România, Simp. Agricultura Ecologică – Alternativa viabilă și vocațională, DGAIA Braia 2003*

Chindriș V., Ștețca Gh. 2010, *Laptele de bivolită-Igiena și calitatea, Ed. Risoprint, Cluj-Napoca*

Man C., Podar C., Ivan I. 2003, *Ecologia exploatării taurinelor, Ed. Academic Pres, Cluj-Napoca*

Man C., Aldescu Teodora, Bobiș A, Albert I. 2004, Ghidul legislativ pentru agricultura ecologică, Ed. Risoprint , Cluj-Napoca  
 Man C., Bobiș A, Albert I. 2004, Tehnologii ecologice pentru creșterea și exploatarea bovinelor și porcinelor, Ed. Risoprint Cluj-Napoca  
 Ștețca Gh., Tuta Gh., 2007, Managementul alimentar-teorie și practică, Ed. Risoprint Cluj-Napoca  
 Ștețca Gh., Macovescu S., 2006, Igiena depozitării produselor de origine animal și sisteme frigorifice, Ed. Risoprint Cluj-Napoca  
 1. Ștețca Gh., 2010, Tehnologii de obținere a materiilor prime de origine animal, Ed. Risoprint Cluj-Napoca

*Optional bibliography:*  
 Marcu N. și col. 2006, Zootehnie general și alimentație, Ed. Digital Data, Cluj-Napoca  
 Marcu N, Dărăban S., 2006, Creșterea animalelor, Ed. Eikon, Cluj-Napoca  
 Patea și col., 1978, Anatomia comparativă și topografică a animalelor domestice, EDP BUcurești  
 Raicu E. și col, Producția de carne și îmbunătățirea ei. Ed. Agrosilvică București  
 Popescu Băran M., și col. Aprecierea calității animalelor de carne  
 Chintescu G. și col, 1968, Prelucrarea laptelui în ferme, Ed. Agrosilvică, București  
 Sârbulescu V., Stănescu V., Văcaru Opriș, Cornelia Vintilă, 1983, Tehnologia și valorificarea produselor animale, EDP București

**9. Corroborating the discipline content with the expectations of the epistemic community representatives, of the professional associations and of the relevant employers in the corresponding field**

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**10. Evaluation**

| Type of activity  | 10.1. Evaluation criteria   | 10.2. Evaluation type | 10.3. Percentage of the final grade |
|---|---|-----------------------|-------------------------------------|
| <b>10.4. Course</b>   | To have knowledge regarding the technologies used in the modern biotechnology industry in order to increase the efficiency of the technological processes in the food industry and to make better use of plant raw materials. | continuous            |                                     |
| <b>10.5. Seminar/Laboratory</b>   |   |                       |                                     |
| <b>10.6. Minimum performance standards</b>  |   |                       |                                     |
| Mastery of scientific information transmitted through lectures and practical papers at an acceptable level.<br>Obtaining the passing grade for the ongoing checks is a condition of promotability.. |   |                       |                                     |

- 1 Cycle of studies - choose one of the three options: Bachelor/Master/Ph.D.
- 2 according to the educational plan
- 3 Discipline status (compulsoriness) - choose one of the options – **DI** (compulsory discipline) **DO** (optional discipline) **DFac** (facultative discipline).
- 4 One credit is equivalent to 25-30 hours of study (teaching activities and individual study).

Filled in on  
11.09.2020

Course coordinator  
Phd. Lecturer Adriana Morea

Laboratory work/seminar coordinator  
Phd. Lecturer Adriana Morea




Approved by the  
department on  
14.09.2020

Head of the Department  
Lecturer PhD. Cristina-Maria Moldovan

