

## DISCIPLINE DESCRIPTION

### 1. Information on the study programme

1.1 Academic Institution	<b>University of Oradea</b>
1.2 Faculty	<b>Faculty of Environmental Protection</b>
1.3 Department	<b>Animal Husbandry and Agritourism</b>
1.4 Field of study	<b>Animal Husbandry</b>
1.5 Cycle of study	<b>Bachelor</b>
1.6 Study programme/Qualification	<b>Animal Husbandry/Engineer</b>

### 2. Information on the discipline

2.1 Name of discipline	<b>Production and Conservation of Fodder II</b>				
2.2 Course holder	<b>Lect. PhD. Eng. Codrin Gavra</b>				
2.3 Seminar/Laboratory/Project holder	<b>Lect. PhD. Eng. Codrin Gavra</b>				
2.4 Year of study	<b>I</b>	2.5 Semester	<b>II</b>	2.6 Type of evaluation	<b>Exam</b>
					2.7 Regime of discipline
					<b>C</b>

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

### 3. Total estimate time (hours per semester of didactic activities)

3.1 Number of hours per week	<b>4</b>	out of which: 3.2 course	<b>2</b>	out of which: 3.3 seminar/laboratory/project	<b>2</b>
3.4 Total hours in the curriculum	<b>56</b>	out of which: 3.5 curs	<b>28</b>	out of which: 3.6 seminar/laboratory/project	<b>28</b>
<b>Time allotment</b>					<b>hours</b>
Study assisted by manual, course support, bibliography and notes					<b>12</b>
Additional documentation in the library/on specialised electronic platforms and in the field					<b>12</b>
Preparation of seminars/laboratories/topics/reports, portfolios and essays					<b>10</b>
Tutorship					<b>4</b>
Examinations					<b>4</b>
Other activities: consultations					<b>2</b>
3.7 Total hours of individual study	<b>44</b>				
3.8 Total hours per semester	<b>100</b>				
3.9 Number of credits	<b>4</b>				

### 4. Prerequisites (where appropriate)

4.1 curriculum	•
4.2 competences	• Competences of information and documentation, the application of knowledge, of individual and group activity.

### 5. Conditions (where appropriate)

5.1. related to course	<ul style="list-style-type: none"> <li>• Lecture hall equipped with laptop, projector, whiteboard, plates, which ensures conditions for active and interactive learning;</li> <li>• It requires compliance with the rules of ethics and good conduct during the course and respecting the timetable;</li> <li>• Active presence and attendance at courses is recommended, absences implicitly affecting the final result. In the case of absences, the responsibility lies with the students to determine the part of the lost subject matter and take measures for recovery;</li> <li>• Mobile phones and similar devices are not allowed during classes.</li> </ul>
5.2. related to seminar/laboratory/ project	<ul style="list-style-type: none"> <li>• Laboratory with material endowments specific to the discipline, respectively practical-applicative learning conditions;</li> <li>• Students are required to wear white robe at the laboratory works, respectively equipment suitable for field trips;</li> <li>• Mobile phones and similar devices are not allowed during classes.</li> </ul>

<b>6. Specific competences acquired</b>	
Professional competences	<ul style="list-style-type: none"> <li>• The ability to identify and recognize the phytotaxons specific to the flora and grassland vegetation;</li> <li>• Knowledge of modern and efficient methods of production and conservation of fodder;</li> <li>• The optimizing of fodder base;</li> <li>• Knowing the nutritional value of fodder and how to use the main feed sources for different animal species.</li> </ul>
Transversal competences	<ul style="list-style-type: none"> <li>• Use of effective lifelong learning methods and techniques for the purpose of training and continuous professional development;</li> <li>• Responsible and effective implementation of the tasks related to the professions in the field, while respecting the principles of professional ethics;</li> <li>• Identifying the role of a team and assuming the appropriate professional and personal responsibilities;</li> <li>• Cultivating a correct and timely work discipline, responsibility for work, team spirit formation, and awareness of the importance of search and research.</li> </ul>

### 7. Objectives of discipline (coming from the specific competences acquired)

7.1 General objective	<ul style="list-style-type: none"> <li>• Acquiring theoretical and practical knowledge of grassland vegetation.</li> </ul>
7.2 Specific objectives	<ul style="list-style-type: none"> <li>• Assimilation by students of knowledge regarding the cultivation of fodder crops;</li> <li>• Establishment of plant cultivation structures within agricultural and forage crops.</li> </ul>

### 8. Content\*

8.1 Course	Methods of teaching	No. of hours/remarks
<b>I.</b> Perennial legumes of fodder: white clover, sainfoin, birds foot trefoil, alfalfa, red clover.	Lecture, video projection system of the didactic material, debate, plates	2
<b>II.</b> Annual legumes of fodder: peas, soya, broad bean, fodder vetch.	Lecture, video projection system of the didactic material, debate, plates	4
<b>III.</b> Annual grasses fodder: corn, barley, oats, rye, millet, sorghum, sorghum × drummondii, ryegrass.	Exposing, video projection system of the didactic material	2
<b>IV.</b> Tuberculous and root plants: potato, sugar beet, fodder beet, carrot, kohlrabi.	Lecture, video projection system of the didactic material, debate, plates	4
<b>V.</b> Other forage plants: cucurbits, sunflower, rapeseed, fodder cabbage.	Lecture, video projection system of the didactic material, debate, plates	4
<b>VI.</b> Cultivation of perennial grasses: ocksfoot, orchard fescue, common couch, red fescue.	Lecture, video projection system of the didactic material, debate, plates	4
<b>VII.</b> Successive fodder crop technology.	Lecture, video projection system of the didactic material, debate, plates	2
<b>VIII.</b> The green conveyer.	Lecture, video projection system of the	2

	didactic material, debate, plates	
<b>IX. Fodder ensilage.</b>	Lecture, video projection system of the didactic material, debate, plates	2
<b>X. Seed production technology for fodder crops.</b>	Lecture, video projection system of the didactic material, debate, plates	2

**Bibliography:**

- Burcea P., Panait V., Popescu V., Bratu V.** – *Production and Conservation of Fodder*, Didactics and Pedagogy Publishing House București, 1981
- Coste I.** – Course "*Plant Morphology and Anatomy*", Lito., USAMVB Timișoara, 1993
- Coste I.** – Course "*Plant Systematics*", Lito., USAMVB Timișoara, 1994
- Dragomir N.** – Curs "*Production and Conservation of Fodder*" Lito , USAMVB, 1997
- Erdelyi Ș., Ionel A., Arvat N., Iacob T., Ignat A., Simtea N.** – *Production and Conservation of Fodder*, Tipografia Agronomia, Cluj-Napoca, 1990
- Ignat A.**, – *The Basis of Fodder Production*, Didactics and Pedagogy Publishing House București, 2000
- Arvat N., Birescu L.** – *Production and Conservation of Fodder*, L.P., Lito. I.A. Timișoara, 1988
- Dragomir N., Pet I.** – *Production and Conservation of Fodder*, L.P., Ed. Waldpress Timișoara, 2002

8.2 Laboratory	Methods of teaching	No. of hours/remarks
<b>I.</b> Description and recognition of cultivated annual and biannual leguminous species.	Laboratory presentation, exposure, plates, outing on the field	4
<b>II.</b> Description and recognition of the species of annual fodder grasses grown.	Exposing, debate, plates, outing on the field	4
<b>III.</b> Description and recognition of root, tuber and cucurbits species.	Exposing, debate, plates, outing on the field	4
<b>IV.</b> Recognition of other fodder and honey plants.	Exposing, debate, plates, outing on the field	4
<b>V.</b> Cultivated varieties of annual and perennial fodder plants.	Exposing, debate, plates, outing on the field	2
<b>VI.</b> Principles of organization in the production of seeds to fodder plants.	Exposing, debate, plates	2
<b>VII.</b> Agrophytotechnical appreciation of fodder crops.	Exposing, debate, plates, outing on the field	2
<b>VIII.</b> Framework technologies for annual and perennial fodder plants.	Exposing, debate, plates	2
<b>IX.</b> Maintenance work for fodder plants and meadows.	Exposing, debate, plates, outing on the field	2
<b>X.</b> Formation of fodder conveyors of cultivated species and varieties.	Exposing, debate, plates	2

**Bibliography:**

- Burcea P., Panait V., Popescu V., Bratu V.** – *Production and Conservation of Fodder*, Didactics and Pedagogy Publishing House București, 1981
- Coste I.** – Course "*Plant Morphology and Anatomy*", Lito., USAMVB Timișoara, 1993
- Coste I.** – Course "*Plant Systematics*", Lito., USAMVB Timișoara, 1994
- Dragomir N.** – Curs "*Production and Conservation of Fodder*" Lito , USAMVB, 1997
- Erdelyi Ș., Ionel A., Arvat N., Iacob T., Ignat A., Simtea N.** – *Production and Conservation of Fodder*, Tipografia Agronomia, Cluj-Napoca, 1990
- Ignat A.**, – *The Basis of Fodder Production*, Didactics and Pedagogy Publishing House București, 2000
- Arvat N., Birescu L.** – *Production and Conservation of Fodder*, L.P., Lito. I.A. Timișoara, 1988
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\* The content, respectively the number of hours allocated to each course/seminar/laboratory/project will be detailed during the 14 weeks of each semester of the academic year.

\* The books presented in the bibliography are printed in Romanian language. Titles and Publishing Houses have been translated into English language for the discipline description.

**9. Corroboration of discipline content with the expectations of the epistemic community, professional associations and representative employers from the field corresponding to the study programme**

- Discipline exists in the curricula of the universities and profile faculties of Romania, thus being in accordance with the curriculum in other university centres;
- By acquiring theoretical notions and practical aspects included in the discipline of *Production and Conservation of Fodder*, students acquire consistent knowledge to facilitate their application in professional work;
- For a better concordance and coordination of the discipline with the requirements of the labour market, have and will occur meetings with representatives of the business environment, respectively with professors from pre-university education.

**10. Evaluation**

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the final grade
10.4 Course	- The correctness of assimilated knowledge; - Coherence and logic in the subject's exposure; - Level of assimilation of the discipline specific terms.	Written examination, active participation in courses	70%
10.5 Laboratory	- The ability to apply the acquired notions in practice; - Level of assimilation of laboratory work.	Colloquium, active participation in the laboratory	30%
10.6 Minimum standard of performance			
<ul style="list-style-type: none"> <li>• Correct assimilation of elementary notions and terms specific to discipline, respectively the recognition of phytotaxons (species) and application of grassland improvement technology.</li> </ul>			

Date of completion  
19.06.2023

Signature of course holder  
Lecturer Dr. Eng. Codrin Gavra  
([gavracodrin@gmail.com](mailto:gavracodrin@gmail.com))



Signature of seminar  
laboratory/project holder  
Lecturer Dr. Eng. Codrin Gavra  
([gavracodrin@gmail.com](mailto:gavracodrin@gmail.com))



Date of approval in the department  
21.06.2023

Signature of the Head of Department  
Lecturer Dr. Eng. Monica Dodu  
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