



No. _____ of _____

USAMV form 0109020103

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 Crop science
1.4. Field of study	Agronomy
1.5. Cycle of study¹	Master
1.6. Specialization/ Study programme	Management of natural and agro-tourism resources in the mountain area
1.7. Form of education	Full time

2. Information on the discipline

2.1. Discipline name		Plant and animal genetic resources in the mountain area						
2.2. Course coordinator			Associate professor dr. Leon MUNTEAN					
2.3. Seminar/ laboratory/ project coordinator			Associate professor dr. Leon MUNTEAN					
2.4. Year of study	II	2.5. Semester	I	2.6. Evaluation type	Continuous	2.7. Discipline status	Content ²	DD
							Compulsoriness ³	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					55
3.4.2. Additional documentation in the library, electronic platforms and field experiences					25
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					20
3.4.4. Tutorials					5
3.4.5. Examinations					10
3.4.6. Other activities					10
3.7. Total hours of individual study	125				
3.8. Total hours per semester	153				
3.9. Number of credits ⁴	6				

4. Prerequisites (if applicable)

4.1. curriculum-related	Phytotechnics, Botany, Zootechnics, Plant breeding, Climatology
4.2. skills-related	The student must have knowledge regarding the biology of the main field crops, the demands on climate and soil, the technology of raising animals in family farms.

5. Conditions (if applicable)

5.1. for the course	The course is interactive, students can ask questions and comment on the content of the course. The university discipline requires the observance of the schedule. No other activities are tolerated during the lecture, mobile phones, tablets, etc. being closed.
5.2. for the	In order to participate in the practical work it is absolutely necessary to consult the specialized

seminar/ laboratory/ project	literature for the announced work; students will have individual activities with the study materials (plants, fruits, seeds, etc.) made available and described in the guide. Academic discipline and seriousness are imposed on the entire duration of the work.
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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	<ul style="list-style-type: none"> - Knowledge of the pedoclimatic conditions in the mountain area and of the restrictions imposed by them for the plant culture. - Identification of the main varieties of wild cereals, maize hybrids, potato varieties, local varieties and populations of fruit trees and shrubs, animal breeds for the mountain area.
Transversal competences	<ul style="list-style-type: none"> - The course graduate will be able to elaborate an integrated project for a medium-sized family farm, in which the varieties of plants and animal breeds to be grown / raised in an area with restrictions regarding some physiological requirements will be chosen of plants / animals.

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

7.1. General objective	Acquisition of knowledge regarding the flora and fauna diversity of the mountain area, of the plant and animal resources that can be cultivated / raised in this area.
7.2. Specific objectives	<ul style="list-style-type: none"> - To know how to identify cultivated plants, how to use medicinal plants, fruit trees in the mountain area. - To identify the main breeds of domestic animals that can be raised and economically exploited in the mountain area.

8. Content

8.1. COURSE Number of hours – 14	Teaching methods	Observation
1. Pedoclimatic conditions of the mountain area. Restrictions on plant culture and animal husbandry.	Lecture	1 lecture
2. Pure cereals for cultivation in the mountain area. Their main features.	Lecture	1 lecture
3. Local populations, varieties and hybrids of maize for the mountain area.	Lecture	1 lecture
4. Local varieties and populations of vegetables and potatoes recommended for the mountain area.	Lecture	1 lecture
5. Fruit trees and shrubs specific to the mountain area.	Lecture	1 lecture
6. Plants of spontaneous flora that can be harnessed in the mountain area. Maintaining biodiversity.	Lecture	1 lecture
7. Domestic breeds that can efficiently exploit the conditions specific to the mountain area.	Lecture	1 lecture

8.2. PRACTICAL WORKS Number of hours – 28	Teaching methods	Observation
1. The study of the climatic and soil conditions from several locations in the Apuseni Mountains.	Charts	1 meeting of practical works
2. The main characteristics of the varieties of grain cereals for the mountain area.	Variety description	1 meeting of practical works
3. Knowledge of the characteristics of potato varieties and vegetables for the mountain area.	Potato tubers, description, culinary characteristics	1 meeting of practical works
4. Description of the main varieties and local populations of fruit trees and shrubs for the mountain area.	Plants with varieties of fruit trees and shrubs	1 meeting of practical works
5. Description of the main breeds of cattle, sheep, goats and pigs adaptable to the mountain area.	Sheets with animal breeds for the mountain area	1 meeting of practical works
6. Natural, vegetal resources of the mountain area (medicinal plants, berries, mushrooms).	Sheets with the main medicinal plants and edible mushrooms	1 meeting of practical works
7. Verification of laboratory knowledge.		1 meeting

Compulsory bibliography:

1. MUNTEAN L., *Notite curs 2020/2021*
2. MUNTEAN L.S. și colab., 2008, *Fitotehnie*, Ed. AcademicPres, Cluj-Napoca
3. MITRE V., 2002, *Pomicultura specială*, Ed. AcademicPres, Cluj-Napoca
4. MITRE V., 2008, *Pomologie*, Ed. Todesco, Cluj-Napoca
5. ONACIU G., 2006, *Proiectare și inginerie tehnică la bovine*, Ed. Casa Cărții de Știință, Cluj-Napoca
6. TAFTĂ, V.H., 2011, *Creșterea ovinelor și caprinelor*, Ed. Ceres, București

Optional bibliography:

1. MINCU ELENA CRISTINA, R. ȚUCULESCU, 2010, *Ciupercile din România*, Ed. Galeria Gutenberg, Tg. Lăpuș

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

In order to identify measures for the modernization and continuous improvement of the teaching and the content of the courses and laboratory works with the most current topics and practical problems regarding the diversity of flora and fauna in the mountain area, including culture plants, the teachers will participate in the annual scientific session of the Institute of Montanology Sibiu and at the meetings of the Commission for the mountain area within ASAS.

10. Evaluation

Type of activity	10.1. Evaluation criteria	10.2. Evaluation type	10.3. Percentage of the final grade
10.4. Course	<ul style="list-style-type: none"> - Knowledge of the main pedo-climatic restrictions in the mountain area. - Knowledge of the main species and varieties of cultivated plants recommended for the mountain area. - Knowledge of the main species of medicinal plants widespread in the mountain area. - Knowledge of the species and breeds of animals recommended for family farms in the mountain area. 	Continuous	60%
10.5. Seminar/Laboratory	<ul style="list-style-type: none"> - Knowing the varieties of plants, local populations of fruit trees and shrubs in the mountain area. - Recognition of the main species of medicinal plants that can be collected from the mountain area. - Recognition of the main edible mushroom species in the mountain area. 	Continuous	30%

10.6. Minimum performance standards

Stăpânirea cunoștințelor transmise prin cursuri și lucrări practice la nivel acceptabil. Obținerea notei de trecere la verificările pe parcurs la lucrări practice este condiție de promovabilitate.

- 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
Associate prof. Leon MUNTEAN, PhD

Laboratory work/seminar coordinator
Associate prof. Leon MUNTEAN, PhD




Approved by the
department on
14.09.2020

Head of the Department
Head of works Cristina Moldovan, PhD

