

COURSE DESCRIPTION**1. General data**

1.1. Higher education institution	University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca
1.2. Faculty	AGRICULTURE
1.3. Department	Plant culture
1.4. Domain of study	Agronomy
1.5. Level of study ¹⁾	Bachelor
1.6. Specialization	AGRICULTURE
1.7. Form of education	Full time

2. Characteristics of the course

2.1. Name of the course	VITICULTURE							
2.2. Course coordinator	Assoc. prof. dr. CLAUDIU-IOAN BUNEA							
2.3. Coordinator of the laboratory/seminar activity	Assoc. prof. dr. CLAUDIU-IOAN BUNEA							
2.4. Year of study	III	2.5. Semester	II	2.6. Type of evaluation	Continuous	2.7. Course regime	Content ²⁾	SD
							Compulsory level ³⁾	OD

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

3.1. Number of hours/week– full time form	4	out of which: 3.2. course	2	3.3. seminar/ laboratory/ project	2
3.4. Total hours in the teaching curricula	56	out of which: 3.5. course	28	3.6. seminar/laboratory	28
Distribution of time					hrs.
3.4.1. Study based on hand book, notes, bibliography					20
3.4.2. Extra documentation in library, on specific electronic platforms and on field					16
3.4.3. Preparation of seminars / laboratories / projects, essays, reports, portfolios					14
3.4.4. Tutorial					4
3.4.5. Examination					10
3.4.6. Other activities					
3.7. Total hours of individual study	64				
3.8. Total hours on semester	120				
3.9. Number of credits ⁴⁾	4				

4. Pre-conditions (where relevant)

4.1. for curriculum	Obligatory: Botany, Pedology, Agrotechnique, Agrochemistry
4.2. for competences	The student must have general knowledge about notions related to the morphology and anatomy of the species, genetic types of soil with their physical, hydrophysical and chemical characteristics, agrotechnical works.

5. Conditions (where relevant)

5.1. for course	The lecture is interactive, students announce themselves before the next course and then they prepare for the concerned theme, while others ask questions about the content of the lecture. University discipline imposes compliance with beginning and ending time of the course. Any other actions during the lecture are not tolerated; mobile phones must be closed.
5.2. for seminar/laboratory/project	During practical works consulting the guide is obligatory, every student will conduct specific individual activities with laboratory equipment and materials made available, which are described in the guide, in the didactic collection of the discipline or within the research and production units in the area.

Professional competences Competențe profesionale	<p>They learn the academic vocabulary specific for the viticulture discipline. They understand the plant morphology, biology and ecology.</p> <p>They recognize the different varieties of vine according to their production destination.</p> <p>They find out about the viticulture patrimony on a mondial scale and in Romania, in the context of economic transformation within the past decades.</p> <p>They learn about over time known and practiced multiplication ways, on an international scale and in Romania.</p> <p>They accumulate knowledge about the zoning of plantations in the world and in Romania, according to their production destination.</p> <p>They learn about vine nursery, it's sectors and their founding.</p> <p>They recognize the different categories of vine planting material.</p> <p>They learn about the founding project of a new plantation, as well as the proper founding.</p> <p>They learn about agrotechnical elements in both young and fruit-bearing plantations, according to their production destination: formative and fructification pruning, dry pruning and green works, directioning and tying of vine stems, soil works etc</p>
Transversal competences	<p>They demonstrate their ability to work in teams.</p> <p>They know the necessary conditions to develop their own business.</p> <p>They get used to the proper language, in order to conduct a specific research activity.</p> <p>They perfect themselves by accumulating knowledge in order to conduct a research or a production activity.</p> <p>They take part in the production and the research activities within the didactic collection or other units.</p>

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

7.1. General objectives	<p>Aknowledging notions regarding the vine morphology, biology, ecology, and multiplication.</p> <p>Aknowledging notions regarding the production technology of the planting material, the founding and the maintenance technology of a vine plantation.</p>
7.2. Specific objectives	<p>To know the organography of the grapevine and plant requirements towards ecopedological and ecoclimatic conditions.</p> <p>To be able to zone varieties according to their production destination, based on the requirements of the specy.</p> <p>To know the multiplication methods practiced worldwide and in our country.</p> <p>To know the grapevines organography to be able to prune, to recognize different categories of vine planting material and to know those requirements necessary for a founding project of a vine plantation.</p> <p>To establish the most adequate culture technology to encourage early fructification and to obtain large, constant and efficient crops.</p>

8. Content

8.1. COURSE Number of hours – 28	Teaching methods	Observations
1.1. The content and object of viticulture	Lecture	1 lecture
1.2. The importance of viticulture in national economy		
2. History of viticulture		
2.1. History of viticulture on the globe		
2.2. History of viticulture in Romania		
3. Origin and systematic of Vitaceae		
4. The actual state of viticulture	Lecture	1 lecture
5. Vine morphology		
6. Vine classification	Lecture	1 lecture
6.1. Botanical classification		
6.2. Ecologo-geografical classification		
6.3. Economic classification		
7. Vine ecology	Lecture	2 lectures
7.1 Viticultural ecosystem		
7.2. Ecoclimatic conditions of the vine		
7.3. Ecopedological conditions		
8. Growing and fructification biology of the vine	Lecture	1 lecture
8.1. Full biological cyle		
8.2. Annual biological cycle		
9. Multiplication biology of the vine	Lecture	1 lecture
9.1. Generative multiplication		
9.2. Vegetative multiplication		
1. Production technology of vine planting material (vine	Lecture	2 lectures

<p>1.1. Nursery sectors</p> <p>1.2. Choosing the emplacement for founding the vine nursery</p> <p>1.3. The founding, the maintenance and the exploitation of rootstock plantations.</p> <p>1.4. Maintenance works in young rootstock plantation and the installation of trellis systems.</p> <p>2. Founding of fruitful vine plantations.</p> <p>2.1. Choosing the emplacement for founding a plantation</p> <p>2.2. Founding of fruitful vine plantations.</p> <p>3. Maintenance of young plantation of fruitful vine.</p> <p>3.1. Works on the plant</p> <p>3.2. Works on the soil</p> <p>3.3. Installing the trellis systems</p> <p>4. Agrotechnical complex in fruit-bearing vine plantations</p> <p>4.1. Works on the plant</p> <p>4.2. Works on the soil</p> <p>4.3. Maintenance works of the trellis systems</p>	<p>Lecture</p> <p>Lecture</p> <p>Lecture</p>	<p>1 lecture</p> <p>2 lectures</p> <p>2 lectures</p>
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<p>8.2. PRACTICAL WORK</p> <p>Number of hours – 28</p> <p>The morphology of the hub</p> <p>Pruning at the vine</p> <p>Leading and tying the grapecanes</p> <p>The main categories of vine planting material</p> <p>Production of vine planting material</p> <p>Planting the vine</p> <p>The green organs of the hub</p> <p>Green works applied in vineyards</p> <p>Verification of knowledge</p>	<p>The dry organs of the hub</p> <p>Pruning classification</p> <p>Training pruning</p> <p>Fruiting pruning</p> <p>Leading and tying the grapecanes</p> <p>Laboratory recognition</p> <p>Manual and mechanized grafting vines</p> <p>Planting techniques</p> <p>Recognition of the shoot with all green organs</p> <p>Current green works</p> <p>Special green works</p> <p>Practical test</p>	<p>1 lab work</p> <p>1 lab work</p> <p>2 lab work in the field in the didactic collection</p> <p>2 lab work in the field in the didactic collection</p> <p>1 lab work</p> <p>2 lab work</p> <p>2 lab work in the field in the didactic collection</p> <p>1 lab work in the field in the didactic collection</p> <p>1 lab work in the field in the didactic collection</p> <p>1 lab work</p>
<p><i>Compulsory bibliography:</i></p> <p>Nastasia Pop, 2001, Viticulture, Ed. AcademicPres, Cluj-Napoca</p> <p>Nastasia Pop, 2003, General viticulture, Ed. AcademicPres, Cluj-Napoca</p> <p>Nastasia Pop, 2010, Course of general viticulture, Ed. EIKON, Cluj-Napoca</p> <p>Nastasia Pop și C. I. Bunea, 2011, Viticulture practical works, Ed. EIKON, Cluj-Napoca</p> <p>Țârdea C., L. Dejeu, 1995, Viticulture, EDP București</p>		
<p><i>Facultative bibliography:</i></p> <p>Oprea Șt., 2001, Viticulture, Ed. AcademicPres, Cluj-Napoca</p> <p>Oșlobeanu M., și colab., 1980, General and special viticulture, EDP București</p>		

9. Corroboration of the subject content with the expectations of the epistemic community representatives, of the professional associations and representative employers in the domain

To enable the identification of continuous modernization and improvement of teaching methods and lectures content, with the most current themes and practical problems, teachers participate in meetings with farmers, researchers from the domain, incurred by SHST and SRH sessions, where current and perspective aspects are debated, visits on the field, in the country or in foreign countries are organized, through interprofessional exchanges, in order to see the most recent achievements in the domain.

Type of activity	10.1. Evaluation criteria	10.2. Evaluation methods	10.3. Percent of the final grade
10.4. Course	<p>To know the morphological, biological and physiological particularities of the vine.</p> <p>Ecoclimatic and ecopedological requirements of the vine.</p> <p>Viticultural ecosystem, full and annual biological cycle of the vine.</p> <p>Botanical, ecologo-geographical and economic classification.</p> <p>Multiplication biology of the vine.</p> <p>To know the base unit profiled in the production of vine planting material (vine nursery).</p> <p>To know the categories of vine planting material and the content of a founding project of a new vine plantation.</p> <p>Maintenance of young fruitful vine plantations.</p> <p>Maintenance of a fruit-bearing vine plantation.</p>	Written exam	70 %
10.5. Seminar/Laboratory	<p>The recognition of directioning systems and forms in Romania's viticulture.</p> <p>The recognition of dry organs of the grapevine.</p> <p>To know the chosal criterias of the vine planting material used for founding a new plantation.</p> <p>Production of vine planting material.</p> <p>Vine grafting.</p> <p>Vine planting.</p> <p>Formative and fructification pruning.</p> <p>The recognition of grapevine green organs.</p> <p>Current green works.</p> <p>Special green works.</p>	Periodic evaluations and a final exam are predicted.	30 %
<p>10.6. Minimal standard of performance</p> <p>Mastering the scientific information transmitted through lectures, essays and practical works in an acceptable way. Taking the passing grade at the periodic evaluations is a requirement to be able to promote.</p>			

¹ Cycle of studies - Bachelor

² Discipline status (content) for the Bachelor level, choose one of the options: **FD** (Fundamental Discipline), **BD** (Basic Discipline), **SD** (Specific Disciplines), **CD** (Complementary Discipline), **UO** (disciplines based on the University's Options).


³ Discipline status (compulsoriness) - choose one of the options – **CD** (Compulsory Discipline), **OD** (Optional Discipline), **ED** (Elective Discipline).

⁴ One credit is equivalent to 25-30 hours of study (teaching activities and individual study).

Course coordinator
Assoc. prof. dr. CLAUDIU BUNEA

Coordinator of the laboratory/seminars
Assoc. prof. dr. CLAUDIU BUNEA

Date of completion
04.09.2019




Date of Department approval
05.09.2019

Head of Department
Prof. dr. Marcel DUDA

