

DISCIPLINE DESCRIPTION

1. Information on the study programme

1.1 Academic institution	UNIVERSITY OF ORADEA
1.2 Faculty	FACULTY OF ENVIROMENTAL PROTECTION
1.3 Department	AGRICULTURE - HORTICULTURE
1.4 Field of study	HORTICULTURE
1.5 Cycle of study	MASTER
1.6 Study programme/Qualification	MODERN HORTICULTURAL TECHNOLOGIES / ENGINEER

2. Information on the discipline

2.1 Name of discipline	MODERN TECHNOLOGIES IN VEGETABLE HOLDINGS						
2.2 Course holder	Chief of works dr. Ing. CĂRBUNAR MIHAI MARCEL						
2.3 Seminar/Laboratory/Project holder	Chief of works dr. Ing. CĂRBUNAR MIHAI MARCEL						
2.4 Year of study	I	2.5 Semester	II	2.6 Evaluation type	Ex	2.7 Regime of discipline	DAP

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

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

3.1 Number of hours/week	3	Out of wich: 3.2 course	1	3.3 seminar/laboratory/project	2
3.4 Total hours in the curriculum	42	Out of wich: 3.5 course	14	3.6 seminar/laboratory/project	28
Time allotment					Hours
Study assisted by manual, course support, bibliography and notes					20
Additional documentation in the library/ on specialised electronic platforms and in the field					30
Preparation of seminars/laboratories/ topics/reports, portfolios and essays					20
Tutorship					4
Examinations					2
Other activities.....					
3.7 Total hours of individual study	76				
3.9 Total hours per semester	118				
3.10 Number of credits	5				

4. Prerequisites (where appropriate)

4.1 curriculum	
4.2 competentions	

5. Conditions (where appropriate)

5.1. related to course	Room equipped with video projector
5.2. related to seminar	Plan, video projector

6. Specific competences acquired

Professional skills	C1. Development and implementation of integrated horticultural technologies for obtaining different types of quality products
Transversal skills	CT3. Objective self-assessment of continuous professional training needs in order to adapt professional skills to the dynamics of the field and the requirements of the labor market; learning new methods and techniques through lifelong learning.

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

7.1 General objective	The discipline of Modern Technologies in vegetable farms aims to deepen the knowledge on the relationships with vegetation factors for each vegetable species, the development of cultivation technologies for each vegetable species, the implementation of modern cultivation technologies of vegetable species grown in protected areas
7.2 Specific objectives	<p>The content of the seminar papers is based on the need to deepen the problems presented in the course.</p> <p>The knowledge is useful in the formation of skills regarding the approach to the specific problems faced by a specialist in a vegetable farm.</p>

8. Content*

8.1 Course	Methods of teaching	No. of hours/Remarks
Chap.1. Control of the culture environment in covered spaces 1.1.Light 1.2.Temperature 1.3. The composition of the air 1.4. Water and soil moisture	Theoretical lectures related to the course topic. Student contributions on course-specific topics are requested	6
Chap. 2 Soil-free cropping systems 2.1. Mineral wool culture system 2.2.The nutrient film culture system 2.3.Culture on organic substrate	Theoretical lectures related to the course topic. Student contributions on course-specific topics are requested	6
Chap. 3 Modern cultivation technologies 3.1 Modern root and bulbous technologies 3.2Modern cabbage and pod technologies 3.3.Modern nightshade and cucurbit technologies	Theoretical lectures related to the course topic. Student contributions on course-	6

	specific topics are requested	
8.2 Seminar	Methods of teaching	No. of hours/ Remarks
8.3 Laboratory		
1. Directing the light in the covered spaces		2
2. Directing the temperature in the covered spaces		4
3. Direction of soil moisture in covered spaces		2
4. Direction of air humidity in covered spaces		2
5. Culture on mineral wool		4
6. Nutrient film culture		2
7. Culture on organic substrate		2
8. Weed control in vegetable crops		2
9. Grafted vegetables		4
10. Directing the hydric regime to the vegetables grown in the field		4
8.4 Project		
Bibliography:		
1. Apahideanu al. S., Maria Apahideanu – 2001 legumicultură specială. Editura Academic Pres, Cluj-Napoca		
2. Dumitrescu M. și colab., 1998 – Producerea legumelor. Editura Ceres, București.		
3. Cărbunar M., Domuța C. 2009-Elemente de tehnologie a tomatelor în solarii, Ed. Univ. Oradea		
4. Ciofu Ruxandra și colab.-2004, Tratat de legumicultură, Ed. Ceres, București		
5. Horgoș A., 1999 – Legumicultură specială. Editura Mirton, Timișoara.		
6. Indrea D. și colab ,2007. – Cultura legumelor, Ed. Ceres București		
7. Indrea D. Alex.-Silviu Apahidean 2004, Ghidul cultivatorului de legume Ed. Ceres București		
8. Popescu V. – 1996 – Legumicultură. Vol.I. Editura Ceres, București.		
9. Popescu V., Horgoș A. – 2003 – Tratat de legumicultură. Editura Ceres, București.		

* 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.

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

The analysis and evaluation of the efficiency of the measures applied for increasing vegetable production and rural development, as well as their impact on the environment and quality of life presented in this course makes it agreed by epistemic communities, social partners, professional associations and employers. Horticulture license. The content of the discipline is found in the curriculum of Horticulture and other university centers in Romania that have accredited this specialization, so that knowledge of the basics is an important requirement for all employers in the field.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the final grade
10.4 Course	For grade 5: All subjects must be solved at minimum standards For grades >5: All subjects must be	Written exam – duration 2 hours	60 %

	solved at maximum standards		
10.5 Seminar			
10.6 Laboratory	In the last laboratory session students must present their laboratory work and the results obtained	All laboratory work must be performed, as a condition to enter the exam. - The value of the laboratory is 40% of the exam grade. - Only the recovery of an outstanding laboratory is allowed (in the last week of the semester)	40 %
10.7 Project			
10.8 Minimum standard of performance: Knowledge of the requirements of vegetable species towards pedoclimatic factors, recognition of the main vegetable species			

Date of completion

Signature of course holder**

Signature of seminar laboratory holder

01.10.2013

Chief of works dr.ing.Cărbunar Mihai

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E-mail: carbunar@yahoo.com

E-mail: carbunar@yahoo.com

Date of approval in the department

Signature of the Head of Department

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Phd.dr.ing. Bandici Gheorghe

Dean signature

Phd.dr.ing. Chereji Ioan

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** - It will be specified: Name, Surname, Didactic degree and contact details (e-mail, web page, etc.).

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