

Plant cultivation technologies 2 (Year II, Semester IV)

Credit value 4

Course category

Domain (Imposed)

Course holders:

Conf. Dr. Teodor Stan

Conf. Dr. Irimia Liviu

Sef lucr. Dr. Dascălu Marius

Discipline objectives (course and practical works)

Disciplina Tehnologii de cultura a plantelor 2 ,alături de alte discipline de specialitate, contribuie la formarea bazei de cunoștințe de specialitate necesare specialiștilor din agricultură.

Discipline Plant Cultivation Technologies 2, along with other specialized disciplines, contributes to the formation of the specialized knowledge base necessary for agricultural specialists.

The main objectives of the discipline are:

-theoretical and practical training of students with general and special elements of vegetable cultivation, ensuring the completion of professional knowledge, which allow a better use of land and buildings for vegetable production, in order to obtain superior production in terms of quantity and quality, as unpolluted as possible, which will ultimately lead to higher profits for growers.

knowledge by students of information on the importance, spread and zoning of grapevine culture worldwide, European and national;

knowledge of the basics of biology, ecology and physiology of the grapevine

formation of the knowledge base on the production of viticulture planting material, establishment and maintenance of vineyards

knowledge of the biological, ecological and technological particularities of fruit trees and shrubs, for the substantiation of cultivation technologies; technology for producing fruit seedlings; establishment and maintenance of fruit plantations in order to obtain superior fruit yields quantitatively and qualitatively in conditions of economic efficiency

Contents (syllabus)

Course (chapters/subchapters)
A. Vegetable growing
The importance, development and objectives of vegetable growing The biological bases of vegetable cultivation Propagation of vegetable plants Ecology of vegetable plants Basic elements of technologies General technology of production of vegetable seedlings General technology for growing vegetable plants in unprotected fields Harvesting, conditioning, transport, storage and recovery of vegetable products
B. Grapevine culture
Introduction Geographical spread of grapevine culture Ecology and biology of the grapevine Production of viticultural planting material Establishment of fruitful vineyards Maintenance of vineyards
C. Fruit trees culture
The importance, development and objectives of fruit growing Biological bases of fruit tree species Ecology of fruit tree species Production of fruit trees planting material Cultivation systems and types of orchards Orchards establishment Orchards maintenance technology Technology of cultivation of fruit species from the pomaceae group (apple and pear). Technology of cultivation of fruit species from the drupaceae group (cherry, sour cherry, apricot, plum, peach and almond)

Practical works
A. Vegetable growing
<p>Knowledge of the assortment of vegetable plants grown in the country and around the world</p> <p>Quality control of vegetable seed</p> <p>Production of vegetable seedlings in open field, forced and protected crops</p> <p>Establishment of vegetable crops in greenhouses, solariums and in the open field</p> <p>General care works applied to vegetable crops in the field, greenhouses and solariums</p> <p>Harvesting and capitalizing on vegetables</p>
B. Grapevine culture
<p>Recognition of the woody organs of the vine stump</p> <p>The study of the root system in vines</p> <p>Bud morphology and anatomy</p> <p>Determination of the total and exposed leaf area of the vine stems</p> <p>Evaluation of fertility and productivity of vine varieties</p> <p>Dry grafting at the table, stratification and forcing of grafted cuttings</p> <p>Determining the viability of buds</p> <p>Determining the load that is left on the hub when cutting</p> <p>Picketing the land for planting vines</p>
C. Fruit trees culture
<p>Fruit branches for pomaceae</p> <p>Fruit branches for drupaceae</p> <p>Fruit branches on nuts species and main fruiting shrubs</p> <p>Crown shapes - pyramids and vessel</p> <p>Crown shapes - palmettes</p> <p>Crown shapes – spindle bush, slender spindle</p> <p>Grafting with detached buds</p>

Bibliography

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Evaluare finală

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Oral examination	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	40%

Persoana de contact

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