

## Horticultural Technologies (IVrd Year of study, VIIth Semester)

**Credit value (ECTS) 4**

### Course category

Domain (Imposed)

### Course holder:

Assist. Prof. PhD. Marius Constantin DASCĂLU

### Discipline objectives (course and practical works)

Discipline aims, in theory and practice, to prepare students in the field of fruit trees culture respectively: nursery, establishment and maintenance of orchards for temperate species (Apple, Pear, Quince, Sweet cherry, Sour cherry, Plum, Peach, Apricot, Common hazel, Walnut, Chestnut, Strawberry, Blueberry, Raspberry, Blackberry, Gooseberry, European blueberry, Sea Buckthorn, European cornel, Dog rose, Elderberry, Damask rose).

### Contents (syllabus)

| Course (chapters/subchapters)  |
|--|
| Definitions, Terminology, classification of the fruit tree species . |
| Morphology and physiology of the fruit tree species                  |
| The life cycle of the fruit tree species                             |
| The ecology of fruit trees and shrubs.                               |
| Nursery for fruit trees and shrubs.                                  |
| New orchard establishment.   |
| Maintenance technology for orchards.                                 |
| Apple tree cultivation   |
| Pear tree cultivation  |
| Sweet and sour tree cultivation                                      |
| Apricot and Plum tree cultivation                                    |
| Peach and Almond cultivation   |
| Walnut, Common hazel and chestnut cultivation                        |
| Elements regarding on shrubs cultivation.                            |

| Practical works   |
|---|
| Fructifying branches for apple and pear trees                             |
| Fructifying branches for quince tree                                      |
| Fructifying branches for sweet and sour cherry trees                      |
| Fructifying branches for plum and apricot trees                           |
| Fructifying branches for peach and almond trees                           |
| Fructifying branches for walnut, common hazel and chestnut trees          |
| Fructifying branches for shrubs   |
| Crown shapes – globular with central spindle and without central spindle. |

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|--|
| Crown shapes – flattened with central spindle and small volume |
| Grafting systems – grafting with detached buds and branches    |
| Main apple varieties   |
| Main pear varieties  |
| Main sweet and sour cherry varieties                           |
| Main plum and apricot varieties                                |
| Main peach and almond varieties                                |
| Main walnut, common hazel and chestnut varieties               |
| Main shrubs varieties.   |

### Bibliography

1. Ceapoiu N., - *Înființarea unei plantații pomicole*, Ed. Ceres, București, 1994.
2. Ceapoiu N. și colab., - *Curs de pomicultură biologică*, U.S.A.M.V. București, 1996.
3. Cireașă V., - *Pomicultură generală*, curs lito., Uai, 1995.
4. Cireașă V., Drobotă Gh., Drobotă Mari - Ann, - *Pomicultură generală* - Îndrumător de lucrări practice, lito U.A.I., 1990.
5. Grădinariu G., Istrate M., **Dascălu M.**, 1998- *Pomicultură*, Ed. Moldova.
6. Grădinariu, G. (2002) – *Pomicultură specială*. Editura „Ion Ionescu de la Brad”, Iași.
7. Istrate M., 2007 - *Pomicultură generală*. Editura „Ion Ionescu de la Brad”, Iași.

### Evaluation

| 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%                           |

### Contact

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