

# POMOLOGY

(Specialization Horticulture 4<sup>th</sup> Year of study, 1<sup>st</sup> Semester)

**Credits (ECTS): 6**

**Course category:** Specialized discipline (mandatory)

**Course holder:** Lecturer Cristina ZLATI, PhD

**Objectives of the discipline:** General objective is the study of the particularities of growth and fruiting of different species and groups of varieties, for the establishment of differentiated technologies. Modernization of specific technologies and varieties of fruit trees and shrubs.

Specific objective is Knowing the importance, origin and distribution area as well as the ecological requirements for the appropriate zoning of the fruit species. The study of the biological and technological particularities of each fruit tree species, for the establishment of technologies differentiated by species and groups of varieties.

## Contents (syllabus)

Course (chapters/subchapters)
<b>1. Introductory notions:</b>
1.1. Variety and fruit tree assortment
<b>2. Research methods used in fruit growing</b>
<b>3. Apple culture technology</b>
3.1. Importance, origin and spread area
3.2. Biological and ecological characteristics
3.3. Technological characteristics
<b>4. Pear culture technology</b>
4.1. Importance, origin and spread area
4.2. Biological and ecological characteristics
4.3. Technological characteristics
<b>5. Quince, medlar and aronia culture technology</b>
5.1. Importance, origin and spread area
5.2. Biological and ecological characteristics
5.3. Technological characteristics
<b>6. Plum culture technology</b>
6.1. Importance, origin and spread area
6.2. Biological and ecological characteristics
6.3. Technological characteristics
<b>7. Sweet cherry culture technology</b>
7.1. Importance, origin and spread area
7.2. Biological and ecological characteristics
7.3. Technological characteristics
<b>8. Sour cherry culture technology</b>
8.1. Importance, origin and spread area
8.2. Biological and ecological characteristics
8.3. Technological characteristics

<b>9. Apricot culture technology</b>
9.1. Importance, origin and spread area
9.2. Biological and ecological characteristics
9.3. Technological characteristics
<b>10. Peach culture technology</b>
10.1. Importance, origin and spread area
10.2. Biological and ecological characteristics
10.3. Technological characteristics
<b>11. Almond culture technology</b>
11.1. Importance, origin and spread area
11.2. Biological and ecological characteristics
11.3. Technological characteristics
<b>12. Walnut culture technology</b>
12.1. Importance, origin and spread area
12.2. Biological and ecological characteristics
12.3. Technological characteristics
<b>13. Hazelnut culture technology</b>
13.1. Importance, origin and spread area
13.2. Biological and ecological characteristics
13.3. Technological characteristics
<b>14. Chestnut culture technology</b>
14.1. Importance, origin and spread area
14.2. Biological and ecological characteristics
14.3. Technological characteristics

<b>Practical activity</b>
Pomological characters used in the determination of pomaceae varieties
Study and recognition of summer and fall apple varieties
Study and recognition of winter apple varieties
Study and recognition of pear varieties
Study and recognition of quince varieties
Pomological characters used in the determination of drupaceae varieties
Study and recognition of plum varieties
Study and recognition of sweet cherry varieties
Study and recognition of sour cherry varieties
Study and recognition of apricot varieties
Study and recognition of peach varieties
Study and recognition of walnut, almond, hazelnut and sweet chestnut varieties
Study and recognition of strawberry, raspberry and blackberry varieties
Study and recognition of black gooseberry and blueberry varieties
Study and recognition of seabuckthorn, elderberry and other shrubs
<b>Project</b>
Farm Territorial organization
Sketch of the location of varieties and pollinators in plantations.
Planting Plan
Pre-measurement 1 Land preparation for tree planting.
Pre-measurement 2. Trees plantation

Pre-measurement 3 Plantation maintenance in the 1 <sup>st</sup> year after planting
Pre-measurement 4 Plantation maintenance in the 2 <sup>nd</sup> year after planting
Pre-measurement 5 Plantation maintenance in the 3 <sup>rd</sup> year after planting
Centralized estimate sheets for the need for Materials, Labor, Transport, Equipment

## Bibliography

1. *Cepoiu N., 1994*- Înființarea unei plantații pomicole, Ed. Ceres, București.
2. *Botez M., Bădescu G., Botar A., 1984*- Cultura pomilor și arbuștilor fructiferi, Ed. Ceres, București.
3. *Cimpoieș Gh., Bucarciuc V., Caimacan I., 2001* – Soiuri de măr. Intreprinderea Editorial Poligrafică Știința Chișinău.
4. *Cimpoieș Gh., 2000* – Conducerea și tăierea pomilor. Intreprinderea Editorial Poligrafică Știința Chișinău.
5. *Cimpoieș Gh., 2002* – Pomicultura specială. Editura Colograf-Com, Chișinău.
6. *Cociu V., și colab., 2006* -Culturile nucifere. Editura Ceres, București.
7. *Ghena N., Braniște N., 2003* – Cultura specială a pomilor. Editura Matrix Rom, București.
8. *Grădinariu G., 2002*- Pomicultură specială. Ed."Ion Ionescu de la Brad" Iași.
9. *Grădinariu G., Istrate M., 2003*- Pomicultură generală și specială, Ed. Moldova.
10. *Grădinariu G., Istrate M., Dascălu M., 1998*- Pomicultură, Ed. Moldova.
11. *Mihăiescu G., Bădescu Gh., 1985*- Pomicultura zonelor înalte, Ed. Ceres, București.
12. *Mitre V., 2007* – Pomologie. Editura Todesco, Cluj-Napoca.
13. *Mladin Gh., Mladin Paula, 1992*- Cultura arbuștilor fructiferi pe spații restrânse, Ed. Ceres, București.
14. *Parnia P. și colab., 1992*- Producerea, păstrarea și valorificarea materialului săditor pomicol și dendrologic, Ed. Ceres, București.
15. *Popescu M. și colab.,* - Pomicultură generală și specială, Ed. Didactică și Pedagogică, București, 1992.
16. *Zlati Cristina, Grădinariu G., 2010* – Pomologie, Ed. Moldova, Iași.

## Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Final exam	Written / oral examination	60 %
Evaluation of the activity during the semester	Written and oral assessments during the semester	40 %

## Contact

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# POMOLOGY

(Specialization Horticulture 4<sup>th</sup> Year of study, 2<sup>nd</sup> Semester)

**Credits (ECTS): 4**

**Course category:** Specialized discipline (mandatory)

**Course holder:** Lecturer Cristina ZLATI, PhD

**Objectives of the discipline:** General objective is the study of the particularities of growth and fruiting of different species and groups of varieties, for the establishment of differentiated technologies. Modernization of specific technologies and varieties of fruit trees and shrubs.

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## Contents (syllabus)

Course (chapters/subchapters)
<b>1. Strawberry culture technology</b>
1.1. Importance, origin and spread area
1.2. Biological and ecological characteristics
1.3. Technological characteristics
<b>2. Blackcurrant and gooseberry culture technology</b>
4.1. Importance, origin and spread area
4.2. Biological and ecological characteristics
4.3. Technological characteristics
<b>3. Raspberry and blackberry culture technology</b>
3.1. Importance, origin and spread area
3.2. Biological and ecological characteristics
3.3. Technological characteristics
<b>4. Seabuckthorn, mulberry, blueberry, elderberry, dog rose and rosa Damascena culture technology</b>
4.1. Importance, origin and spread area
4.2. Biological and ecological characteristics
4.3. Technological characteristics
<b>5. Fig and potted lemon culture technology</b>
5.1. Importance, origin and spread area
5.2. Biological and ecological characteristics
5.3. Technological characteristics

Practical activity
Study and recognition of the main rootstocks for fruitgrowing
Differentiated pruning technology in apple and pear intensive and superintensive plantations
Differentiated pruning technology in plum plantations
Differentiated pruning technology in sweet and sour cherry plantations
Differentiated pruning technology in apricot and peach plantations

## Bibliography

1. *Cepoiu N., 1994*- Înființarea unei plantații pomicole, Ed. Ceres, București.
2. *Botez M., Bădescu G., Botar A., 1984*- Cultura pomilor și arbuștilor fructiferi, Ed. Ceres, București.
3. *Cimpoieș Gh., Bucarciuc V., Caimacan I., 2001* – Soiuri de măr. Intreprinderea Editorial Poligrafică Știința Chișinău.
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8. *Grădinariu G., 2002*- Pomicultură specială. Ed."Ion Ionescu de la Brad" Iași.
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10. *Grădinariu G., Istrate M., Dascălu M., 1998*- Pomicultură, Ed. Moldova.
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