

## **ARBORICULTURE (II)**

### **Specialization Landscaping, 3<sup>rd</sup> Year of study, 1<sup>st</sup> Semester**

**Nr. transferable credits: 4**

**Domain discipline: Domain-specific discipline (mandatory)**

**Discipline holder: Lecturer SANDU TATIANA Ph. D.**

#### **Objectives of the discipline (course and applications):**

The course and practical applications have the following objectives:

- acquisition of knowledge regarding morphology, ecology, culture technology, knowledge and proper use of dendrological species and varieties that are used in landscape architecture and environmental protection in our country.
- theoretical and practical knowledge of the particularities of culture and use, in order to use the main species of ornamental trees and shrubs when designing and arranging the green spaces, at the level of knowledge for European and world higher education;
- the practical use of information on the best technologies in generative breeding as well as the cultivation technologies of the main dendrological species.

#### **Content of the discipline**

<b>COURSE (Chapters / Subchapters)</b>
<b>Head. 1. Study of the characteristics, cultivation technology and how to use ornamental woody plants - Spermatophyta class, subincreng. Magnoliophytina (Angiospermae) - continued</b> Fam. Corylaceae, genus Corylus, genus Carpinus, genus Ostrya, Fam. Polygonaceae, genus Polygonum; Fam. Hydrangeaceae, genus Deutzia, genus Philadelphus, genus Hydrangea. Fam. Grossulariaceae, genus Ribes, Fam. Rosaceae, subfam. Rosoideae, genus Spiraea, genus Sorbaria, genus Physocarpus, genus Rhodotypos, genus Kerria, genus Rubus, genus Exochorda. Fam. Rosaceae, subfam. Rosoideae, genus Rosa. Fam. Rosaceae, subfam. Maloideae, genera Malus, Pirus, Chaenomeles, Fam. Rosaceae, subfam. Maloideae, genera Sorbus, Crateagus, Cotoneaster. Fam. Rosaceae, subfam. Prunoideae, genus Prunus, Fam. Mimosaceae, genus Albizia, Fam. Caesalpiniaceae, genera Cercis, Gleditsia, Gymnocladus, Fam. Fabaceae, genera: Sophora, Cladastris, Genista, Cytisus, Laburnum, Amorpha, Wisteria, Robinia, Colutea, Caragana, Lespedeza. Fam. Elaeagnaceae, genera: Elaeagnus, Hippophae, Fam. Cornaceae, genus Cornus. Fam. Celastraceae, the genus Euonymus; Fam. Aquifoliaceae, genus Ilex, Fam. Buxaceae, genera Buxus, Pachysandra; Fam. Rhamnaceae, genera: Rhamnus, Paliurus, Frangula.Ceanothus. Fam. Vitaceae, genus Parthenocissus Fam. Staphylaceae, genus Staphylea. Fam. Aceraceae, genus Acer; Fam. Sapindaceae, genus Köelreuteria; Fam. Hippocastanaceae, genus Aesculus; Fam. Anacardiaceae, genera Cotinus, Rhus, Fam. Simaroubaceae, the genus Ailanthus. Fam. Rutaceae, the genus Ptelea, Fam. Araliaceae, genera Hedera, Aralia. Fam. Paeoniaceae, the genus Paeonia. Fam. Tiliaceae, genus Tilia; Fam. Malvaceae, genus Hibiscus; Fam. Tamaricaceae, the genus Tamarix.

Fam. Salicaceae, genera Salix, Populus. Fam. Ericacea, genera Erica, Bruckenthalia, Calluna, Kalmia, Vaccinium, Rhododendron; Fam. Asclepiadaceae, the genus Periploca.
Fam. Buddlejaceae, the genus Buddleja Fam. Oleaceae, genera Fraxinus, Syringa, Ligustrum, Forsythia. Fam. Solanaceae, genus Lycium; Fam. Verbenaceae, genera Clerodendrum, Caryopteris, Callicarpa
Fam. Scrophulariaceae, genus Paulownia; Fam. Bignoniaceae, genera Catalpa, Campsis, Fam. Caprifoliaceae, genera Lonicera, Symphoricarpu, Sambucus, Weigella, Viburnum, Kolkwitzia.
<b>Practical work</b>
Harvesting of fruits and seeds of dendrological plants.
Processing (conditioning) of fruits and seeds.
Seeding (preservation) of seeds.
Preparing the seeds for sowing.
Generative propagation (by seed sowing) of ornamental woody plants.
Repetition of young seedlings (reticle I and reticle II).
Planting of seedlings in the training sections.
Training works applied in the dendrological nursery.
Dendrological crop care.
Removing and packing of dendrological planting material.
Dendrological material retention.
Transportation of seedlings for recovery.
Technology for the production of dendrological material in containers.
Calendar of the main works in the dendrological nursery.

## Bibliography

1. Sandu Tatiana, 2009 - *Ornamental arboriculture*. "Ion Ionescu de la Brad" Publishing House, Iași.
2. Sandu Tatiana, 2016 - *Ornamental arboriculture - Practical works*, PIM Publishing House, Iași.
3. Sandu Tatiana, Vlahidis V., 2016 - *Dendrological nursery*, "Ion Ionescu de la Brad" Publishing House, Iași.
4. Sofletea N., Curtu L., 2008 - *Dendrology*, "For Life" Publishing House, Brasov.

## Final evaluation

Forms of evaluation	Modalities of evaluation	Percentage of the final note
Oral examination	Acquisition of the knowledge presented at the lectures and from the additional bibliography	60%
Practical work	Attendance and course monitoring	20%
	Individual study	20%

## Contact

Lecturer SANDU Tatiana Ph.D.

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