## Botany (I$^{st}$ Year of study, I$^{st}$ Semester)

**Credit value (ECTS) 5**

**Course category**
Fundamental discipline

**Discipline Code:** A.EMIAIA.F.105

**Course holder:**
**Prof. Culiţă SÎRBU, PhD**

**Discipline objectives (course and practical works)**

The course and practical works aim to provide students with basic notions on plant morphology, plant anatomy, and plant classification and to develop basic skills for analyzing and interpreting the structure of plant cells, tissues, and organs, as well as for identifying the main plant species in the agricultural ecosystem.

**Contents (syllabus)**

| Course (chapters/subchapters) |
|---|
| 1. Plant morphology and anatomy |
| 1.1. Plant cells |
| 1.2. Plant tissues |
| 1.3 The vegetative organs of plants: the root, stem and leaf |
| 1.4. The generative organs of plants: the flower, fruit and seed |
| 2. Plant systematic and taxonomy |
| 2.1. Plant taxa. Plant nomenclature. General characteristics of the Kingdom Plantae and the phylum Magnoliophyta |
| 2.2. The families of plants most important for agricultural ecosystems |
| Fam. Pinaceae, Fam. Rosaceae |
| Fam. Fabaceae, Fam. Vitaceae, Fam. Apiaceae |
| Fam. Brassicaceae, Fam. Solanaceae, Fam. Lamiaceae |
| Fam. Asteraceae |
| Fam. Liliaceae |
| Fam. Poaceae |

| Practical works |
|---|
| Plant cells and tissues |
| Root morphology and anatomy (primary structure) |
| Stem morphology and anatomy (primary structure). Verification test |
| Leaf morphology and anatomy (primary structure) |
| The flower |
| The fruit |
| The seed. Verification test |
| Fam. Rosaceae |
| Fam. Fabaceae; Fam. Apiaceae |

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|---|
| Fam. Brassicaceae |
| Fam. Solanaceae, Fam. Lamiaceae |
| Fam. Asteraceae |
| Fam. Liliaceae |
| Fam. Poaceae. Verification test |

## References


Anghel Gh., Ciocârlan V., Ulinici A. 1972 – Buruienile din culturile agricole şi combaterea lor, Edit. Ceres, Bucureşti.

Ciocârlan V. 2009 – Flora ilustrată a României. Pteridophyta et Spermatophyta, Edit. Ceres, Bucureşti.

Ciocârlan V., Berca M., Chirilă C., Coste I., Popescu Gh., 2004 – Flora segetală a României, Edit. Ceres, Bucureşti.

Păun M. el al. 1980 - Botanicã. Edit. Did. şi Ped. Bucureşti.

Săvulescu T. (ed.) 1952-1976 – Flora R.P. Române (R.S. România) (I-XIII), Edit. Acad. R.P. Române (R.S. România), Bucureşti.

Sîrbu C. 2020 - Botanica. Morfologia și anatomia plantelor. Edit. "Ion Ionescu de la Brad", Iaşi.

Sîrbu C., Paraschiv N.L. 2005 - Botanica sistematică. Edit. I.I. de la Brad Iaşi.

Turenschi E., Pascal P., Sîrbu C., Paraschiv N.L. 1998 - Lucrari practice-Botanica, Litogr. USAMV Iaşi, 146 pp.

Zanoschi V., Toma M., 1990 – Curs de Botanică. Partea I-a, Anatomie şi Morfologie, Litogr. Inst. Agr. Iaşi.


## Evaluation

| Evaluation form | Evaluation Methods | Percentage of the final grade |
|---|---|---|
| Appreciation of the activity during the semester | Oral assessment during the semester; Verification tests | 30% |
| | Presence and participation in discussions | 10% |
| Final examination | Written examination | 60% |

## Contact


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