



## Syllabus

**Term:** 2026/27/1      **Subject name:** Plant Anatomy and Morphology - lecture      **Subject code:** ENBIOB2101

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**Unit (Unit code)** (BIOLOGIA)

**Lecturer responsible for the course:** Dr. KOCSIS Marianna

**Requirement:** Exam

**Classes per week :** 3/0/0

**Classes per term:** 39/0/0

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### Purpose of education:

Students completing the course successfully:

Are familiar with the principles of cellular and tissue organization of the plant, its biological significance, the morphological structure of the plant organization, have knowledge of the terminology of the field of science, and apply it correctly;

Are able to evaluate and explain biological processes based on knowledge of the structure and function of plant cells, to recognize and interpret plant cell, histological and morphological diagrams, microphotos,

They are open to familiarizing themselves with the disciplines involved in the plant organization, have basic information, and strive to apply plant knowledge during their further studies.

### Contents:

Week 1 Course Overview and Introduction. The microscope parts. How To Use a Light Microscope. Plant cell organs.

Week 2 Meristems of the root. Meristems of the shoot. The epidermis. Stomata, trichomes, secondary epidermis.

Week 3 Ground tissues. Vascular tissues.

Week 4 Root and stem anatomy.

Week 5 Leaf, flower parts and fruit anatomy.

Week 6 Summary. 1st written test.



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### Contents:

Week 7 Root morphology. Modified roots.

Week 8 Shoot morphology. Shoot types. Leaf morphology and anatomy. Leaf arrangement (phyllotaxis). Leaf venation.

Week 9 Morphology of flower parts.

Week 10 Inflorescences. Fertilisation, embryogenesis, ovule and seed. Fruit types 1.

Week 11 Fruit types 2.

Week 12 Summary. 2nd written test.

Week 13 Semester closing.

### System of examining and valuation:

2 written tests (week 6. and 12.) are based on lectures.

Grades:

0–49% fail

50–64% acceptable

65–74% average

75–89% good

90–100% excellent



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### Bibliography:

1. William C. Dickinson 2000: Integrative Plant Anatomy. Academic Press.
2. Larry R. Peterson, Carol A. Peterson, Lewis Melvill 2008: Teaching Plant Anatomy through creative laboratory exercises. NRC Press, Ottawa, Ontario. 164 pp.
3. Cutler D.F., Botha T., Stevenson D.W. (2008) Plant Anatomy. An Applied Approach. Wiley-Blackwell
4. Evert R.F., Eichhorn S.E. (2006) Esau's Plant Anatomy: Meristems, Cells and Tissues of the Plant Body: Their Structure, Function and Development. 3rd edition. Wiley
5. Fahn A. (1990) Plant Anatomy. 4th edition. New York, Pergamon Press
6. Glimn-Lacy J. and Kaufman P.B. (2006) Botany Illustrated. Introduction to Plants, Major Groups, Flowering Plant Families. Springer, New York.
7. Mauseth J.D. Plant Anatomy Laboratory. Micrographs of Plant Cells and Tissues, with Explanatory Text. <http://www.sbs.utexas.edu/mauseth/weblab/>

### Bibliography: