



Univerza v Mariboru
University of Maribor

Fakulteta za naravoslovje in
matematiko
Faculty of Natural Sciences and
Mathematics



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Splošna botanika
Subject Title:	General Botany

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Biologija/Biology	Biologija/Biology	1	1

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Lab. work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
45			45		90	6

Nosilec predmeta / Lecturer: Mitja KALIGARIČ

Jeziki / Languages:	Predavanja / Lecture:	slovenski / Slovenian
	Vaje / Tutorial:	slovenski / Slovenian

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti: **Prerequisites:**

Vsebina:

1. Kemična sestava rastlinske celice
2. Citologija: funkcionalna struktura celice
3. Delitev celice: mitotična, mejoza
4. Histologija: funkcionalna struktura tkiv
5. Rastlinski organi
6. Razmnoževanje, rast in osnove dednosti.

Contents (Syllabus outline):

1. Chemical structure of plant cell.
2. Cytology: cell functional structure.
3. Cell division: mitosis, meiosis.
4. Histology: functional structure of tissues.
5. Plant organs.
6. Reproduction, growth and principles of heredity.

Temeljni študijski viri / Textbooks:

- Mauseth, J. D., 2003: Botany. An introduction to Plant Biology. Jones and Bartlett Publishers, Massachusetts.
- Raven, P. H., R. F. Evert, S. E. Eichhorn, 1999: Biology of Plants. W.H. Freeman and company Worth Publishers.
- Sitte, P., E. W. Weiler, J.W. Kadereit, A. Bresinsky, C. Körner, 2002: Lehrbuch der Botanik. 35. Auflage. Spektrum Akademischer verlag Heidelberg, Berlin.

Cilji:

Objectives:

1. Poznati kemično zgradbo rastlin
2. Razumeti funkcionalno strukturo celice
3. Razumeti delitev celice
4. Razumeti strukturo in funkcijo tkiv in organov
5. Razumevanje razmnoževanje, rasti in osnov dedovanja

1. To learn the chemical structure of plants.
2. To understand the structure and functioning of cell.
3. To understand the cell division.
4. To understand the structure and functioning of tissues and organs.
5. To understand the reproduction, growth and principles of heredity.

Predvideni študijski rezultati:

Intended learning outcomes:

Znanje in razumevanje:

- Študent dobi vpogled v osnovno razumevanje zgradbe in delovanja rastlinske celice, tkiv in organov.
- Razume povezanost med strukturo in funkcijo in biotsko pestrostjo.

Prenesljive/ključne spretnosti in drugi atributi:

- Študent usvoji nekaj glavnih metod in pridobi prakso v prepoznavanju in delovanju celic, tkiv in organov rastlinskih organizmov.

Knowledge and Understanding:

- Student should get an overview and basic understanding of plant cell, tissues and organs.
- Student should link the structure and function with biodiversity.

Transferable/Key Skills and other attributes:

- Student capture the most important methods and practices in recognition and functioning of plant cells, tissues and organs.

Metode poučevanja in učenja:

Learning and teaching methods:

- Predavanja
- Laboratorijske vaje

- Lectures
- Laboratory exercises

Načini ocenjevanja:

Delež (v %) /
Weight (in %)

Assessment:

- Praktični kolokvij
- Ustni kolokvij
- Pisni izpit

25
25
50

- Practical examination
- Oral examination
- Written examination

Materialni pogoji za izvedbo predmeta :

- Multimedijaska predavalnica
- Osnovni laboratorij

Material conditions for subject realization

- Lecture hall for multimedia presentations
- Basic laboratory

Obveznosti študentov:

(pisni, ustni izpit, naloge, projekti)

Students' commitments:

(written, oral examination, coursework, projects):

- Praktični kolokvij
- Ustni zagovor
- Pisni izpit

- Practical examination
- Oral discussion
- Written examination