BIOS 2005 BOTANY

Credit Points 10

Legacy Code 300836

Coordinator Kristine Crous (https://directory.westernsydney.edu.au/search/name/Kristine Crous/)

Description From microscopic algae to giant flowering angiosperms, this subject develops students knowledge and understanding of plants on earth. The subject covers the topics of plant anatomy and morphology, classification and systematics, and evolution. Students will examine the major groups of plants: green algae, bryophytes, lycophytes, monilophytes, gymnosperms and angiosperms. Laboratory and field work involves the study of common Australian plants and economically significant plants.

School Science

Discipline Botany

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) BIOS 1001

Equivalent Subjects LGYB 5440 - Botany LGYA 5941 - Botany

Assumed Knowledge

Basic knowledge of biology, chemistry and ecology.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Define botany as an area of study and place it in its scientific and social context.
2. Explain how evolutionary processes have led to the diversity of plants.
3. Describe the characteristics of the major groups of plants, and how tools such as microscopy and molecular biology can be used to study them.
4. Explain how botany is used to solve real-world problems such as measuring biodiversity.
5. Conduct botanical investigations safely and ethically in the field and laboratory, using appropriate methodologies correctly to obtain valid data.
6. Use spreadsheets and statistical tools in analytical programs to enter, analyse and graph data and to draw appropriate conclusions.
7. Communicate findings correctly in written form using an appropriate style, accessing the botanical literature to place the findings in context.

Subject Content

Plant tissues
Plant morphology
Plant development
Plant reproduction and alternation of generations
Classification and systematics of the major groups of plants
Plant evolution

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Online Quizzes	20 min per week (10 - 12 weeks)	20	N	Individual
Report on Family Characteristis and plant biodiversity via Virtual Herbarium	1500 words	30	N	Individual
Tasks from tutorials and practicals	1 hour per tutorial/prac	20	N	Individual
Examination	2 hours	30	N	Individual

Prescribed Texts

- Mauseth JD (2017) Botany: an Introduction to Plant Biology. 6th edn. Sudbury: Jones and Bartlett