COURSE DETAIL

PLANT DIVERSITY AND FUNCTIONAL BIOLOGY
Country South Africa
Host Institution University of Cape Town
Program(s) University of Cape Town
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 126
UCEAP Course Suffix
UCEAP Official Title PLANT DIVERSITY AND FUNCTIONAL BIOLOGY
UCEAP Transcript Title PLANT DIV&FUNC BIOL
UCEAP Quarter Units 8.00
UCEAP Semester Units 5.30

Course Description

The course begins with a discussion on the nature and origin of plants that includes an overview of major autotrophic eukaryote lineages. The benefits and challenges of life in water and on land are also presented. Diversity and evolution of life histories and reproductive systems in plants and consequences of the diversity of major plant lineages are studied. The functional biology of the major organs of the plant including roots, stems, and leaves in relation to strategies for resource acquisition and utilization, mineral nutrition, plant water relations, and carbon metabolism are considered. This entails studying variations in root, stem, and leaf morphologies in various plant lineages and unique terrestrial and aquatic environments and their function in water, nutrients, and carbon metabolism. There is a strong focus on African plants and a particular emphasis on the Cape Floristic region. The course practicals are compulsory and complement the theory with hands-on experience in working with different lineages of plants, data collection and analysis from scientific studies and experiments, and scientific writing. A compulsory 4-day field camp is undertaken for students to study the relationship between ecology and plant morphology, function, and diversity. Assessment: A 3-hour examination, with a subminimum of 40%, counts 50% of the course. Coursework marks will be allocated as follows: Practical classes count 20%, project based on field camp counts 10%, and two class tests count 20%.

Language(s) of Instruction
English

Host Institution Course Number
BIO2017S

Host Institution Course Title
PLANT DIVERSITY AND FUNCTIONAL BIOLOGY

Host Institution Course Details
https://uct.ac.za/sites/default/files/media/documents/uct_ac_za/49/2023_SCI_Han...

Host Institution Campus University of Cape Town
Host Institution Faculty Science
Host Institution Degree
Host Institution Department Biological Sciences
Course Last Reviewed 2022-2023

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