



Code: Plant Biology

Degree: Licenciatura in Biology

Curricular Year: 2nd 3º Semester - Compulsory

7.5 ECTS 2,5horas Theoretical + 2,5horas Experimental

Total hours: 210 horas

Coordinator: Wanda Viegas

Lecturer(s): Ana Caperta; Tiago Henriques; Manuela Silva; José Carlos Costa; Margarida Delgado; Ana Monteiro ; Leonor Morais; Glória Esquível; Sara Amâncio

Objectives: To gain a basic understanding on the origin and evolution of terrestrial plants
To develop concepts concerning the factors leading to the great diversity among plants
To understand plant adaptations that allow their survive on distinct environments

Programme

Origin and Evolution of Terrestrial Plants
Polyploidization as an evolutive force
Plant communities and landscape
Major taxonomic groups of Pteridofites, Gimnosperms and Angiosperms
Major rules for plant protection and identification of the Portuguese most endangered species
Embryogenesis and meristems: gene control for the meristems establishment and maintenance
Vascular tissues: xylem and phloem importance on plants adaptations to life on land.
Plant reproductive anatomy: floral structure and evolution
Plants reproductive ecology
Genetic mechanisms of self-incompatibility
Cell growth: biochemistry and biophysiscs of the elongation of primary cell wall and its regulation
Hormone action in plant development

Bibliography

Main Bibliography

Raven PH, Evert RF & Eichhorn SE 1999. Biology of Plants. 6ª Ed. W.H. Freeman and Companys Worth Publishers
Campbell, N.A. and Reece, J.B. 2005 Biology . Benjamin Cummings

Other Bibliography

Moore R, Clark WD, Stern KR & Vodopich D 1995. Botany. WCM Publishers. London
Selected scientific papers

Assessment

Continuos evaluation is compulsory:
Two major examinations
Weekly evaluation
Written and oral presentation of a revision theme