

UNIVERSITY OF THE WEST INDIES
CAVE HILL CAMPUS

FACULTY OF PURE & APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL & CHEMICAL SCIENCES

BL 14A - BIODIVERSITY I: THE PLANT KINGDOM

LECTURE	TOPIC
1, 2, 3	What is a plant? Features of plants, plant classification systems. Other groups formerly classified as plants. Algae: distinguishing features, habitats, uses, major groups including blue-green bacteria, structural diversity (viz. examples of unicells to seaweeds), types of syngamy, life cycles of <i>Ulva</i> , <i>Laminaria</i> , <i>Sargassum</i> . Alternation of generations.
4	The conquest of the land: problems associated with this transition. Early land plants, e.g. <i>Rhynia</i> . The enigma of <i>Psilotum</i> .
5,6	Bryophytes: mosses & liverworts (hornworts excluded) - morphology, life cycles. Diversity of spore dispersal mechanisms.
6,7	Pteridophytes: ferns, <i>Lycopodium</i> , <i>Selaginella</i> , <i>Equisteum</i> - life cycles, morphology. Reference to dominance of this group in the Carboniferous period.
8, 9	Evolution of the seed habit: including importance of heterospory and endospory. Gymnosperms: cycad & conifer morphology & reproduction.
10	Angiosperms: their unique attributes. Monocot/dicot differences. Trends in flower structure.

COURSE TEXT

Raven, P.M. et. al (1998) Biology of Plants Worth Publ.

FURTHER READING

Richardson, D.H.S. (1981). The biology of mosses. Blackwell Sci. Publ.

Sze, P. (1986). A biology of the algae. Wm. C. Brown. Publ.

Thomas, B.A. & Cleal, C.J. (2000). Invasion of the Land. National Museums & Galleries of Wales.

WEB SITE

<http://scitec.uwichill.edu.bb/bcs/bl14apl/bl14apl.htm>