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 Ulva, Laminaria, Sargassum. Alternation of generations.
4	**The conquest of the land:** problems associated with this transition. Early land plants, e.g. Rhynia. The engima of Psilotum.
5,6	**Bryophytes:** mosses & liverworts (hornworts excluded) - morphology, life cycles. Diversity of spore dispersal mechanisms.
6,7	**Pteridophytes:** ferns, Lycopodium, Selaginella, Equisteum - 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.

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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