EEB340H1S Comparative Plant Morphology

Lecture M,W 1-2, 3087 ESC; Lab Th 9-12, 3088 ESC

LECTURE AND LABORATORY SCHEDULE WINTER/SPRING 2015

Evolution of Roots

| WEEK OF: | LECTURE | LAB |
|----------|--|--|
| JAN 5 | Introduction | Plant Diversity and Geological Time |
| | Geological Time and Temporal Origins of Land Plants | |
| JAN 12 | Origin of Land Plants: Evolution of Meristems And Parenchymatous Growth | Origin of Land Plants |
| JAN 19 | Evolution of Vascular Tissue: Xylem | Evolution of Vascular Tissue |
| JAN 26 | Evolution of Vascular Tissue: Phloem Evolution of Leaves | Bryophyta and Lycophyta Diversity and Vegetative Morphology |
| FEB 2 | Evolution of Leaves | Pterophyta Diversity and Vegetative Morphology |

FEB 9 Review Lecture For

Exam 1

Cycadophyta, Ginkophyta,

and Coniferophyta Diversity and Vegetative

Morphology

LECTURE EXAM 1, Feb 11

FEB 16-20 READING WEEK

FEB 23 Evolution of Alternation

Of Generations

Alternation of Generations in Bryophyta,

Hepatophyta, and Anthocerophyta

Lab Exam 1, in lab

MAR 2 Gametophytes of

of Seedless Vascular

Plants

Alternation of Generations in Pterophyta

and Lycophyta

Fertilization in Seedless

Vascular Plants

MAR 9 Evolution of the Ovule Comparative Reproductive Morphology

of Cycadophyta, Ginkgophyta, and

Coniferophyta

Gametophytes of

Cycadophyta, Ginkgophyta,

and Coniferophyta;

Fertilization

MAR 16 Anthophyta: Pollination in Anthophyta

Private Life of Plants

Gametophytes/fertilization

In Angiosperms

MAR 23 Gametophytes/fertilization

In Angiosperms

Field trip to Allen

MAR 30 Gametophytes/fertilization

In Gnetophyta

Lab Exam 2, in lab

Review Lecture For Exam 2

LECTURE EXAM 2: Finals week, to be announced.

INSTRUCTOR:

Tammy Sage – Room 2079 Earth Science Center, 416- 978-7660 Office Hours - by appointment

GRADING:

- 2 Lecture Exams at 30% each
- 2 Laboratory Exams at 20% each

Make-up exams will only be given to individuals who have official University of Toronto medical documentation. Make-up exams must be taken within one week of missed exam.

There is no official text for this course. However, selected readings from the following texts are available in ESC Library. The following texts from which these readings have been obtained have also been put on hold:

Terrestrial Ecosystems Through Time. 1992. A.K. Behrensmeyer, J.D. Damuth, W.A. DiMichelle, R. Potts, HD Sues, S.L. Wing. The University of Chicago Press.

Morphology and Evolution of Vascular Plants. 1996. E.M. Gifford, A.S. Foster. W.H. Freeman and Co.

Plants Invade the Land. 2001. P.G. Gensel, D. Edwards. Columbia University Press

Origin of Land Plants. 1993. L. Graham. John Wiley & Sons

The Evolution of Plant Physiology. 2004. A.R. Hemsley, I. Poole. Elsevier Academic Press.

The Origin and Early Diversification of Land Plants. 1997. P. Kenrick, P.R. Crane. Smithsonian Institution Press.

Phylogeny and Evolution of Angiosperms. 2005. D.E. Soltis, P.S. Soltis, P.K Endress, M.W. Chase. Sinauer Associates, Inc.

The Evolution and Palaeobiology of Land Plants. 1987. B.A. Thomas, R.A. Spicer. Croom Helm Ltd.

The Evolution of Land Plants. 2002. K.J. Willis, J.C. McElwain. Oxford University Press.