## BIOLOGY 324 – BIOLOGY OF LAND PLANTS COURSE OUTLINE – SPRING TERM 2020

Monday, Thursday; 1:00 – 2:30 p.m. Engineering and Computer Science (ECS) Rm. 124

**Course Instructor:** Dr. Barbara Hawkins email: bhawkins@uvic.ca

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**Lab Instructor:** Dr. Katy Hind email: khind@uvic.ca

Office: Cunn 126a

**Course Objectives:** To provide a basic understanding of land plant anatomy, morphology, diversity and evolution. We will learn how plants grow and reproduce. Plant response to the environment will be explored on anatomical and morphological levels. We will study plant evolution and the increasing complexity of plant form over time. Laboratory exercises are closely coupled

to lecture topics and reinforce the concepts learned in class.

**Textbook:** Raven Biology of Plants, 8<sup>th</sup> Ed'n (2013), Evert & Eichhorn, Freeman Publ. (recommended)

Additional readings may be assigned.

**Lab Manual:** Biology 324 Laboratory Manual 2020 (required - available from the Bookstore)

Labs are held in Cunn 118

Web Material: The slides for each lecture will usually be made available before class on the BIOL 324 CourseSpaces site. Please be aware that these are outlines, not detailed notes, which are provided to help you organize and review the lecture material. Exams will be based on

lecture material, but readings from the text will help reinforce concepts.

**Evaluation:** Lab 35%

2 Midterm Exams (Feb 3, Mar 9) – 15% ea = 30% Final Exam (April 2020) 35%

**Letter Grade Conversion:** A+ 90-100% A 85-89.5% A- 80-84.5%

B+ 77-79.5% B 73-76.5% B- 70-72.5% C+ 65-69.5% C 60-64.5% D 50-59.5%

F (fail) <49.5%

There will be no deferred or supplemental midterm or final exams. If you miss a midterm for a **documented** medical reason, the evaluation breakdown will be adjusted accordingly. Make-up final exams will only be considered if a formal Request for Academic Concession is provided.

## **Proposed Course Outline 2020**

DAT	E	LECTURE	TEXT	LABORATORY
			Chapters	
Jan	6	Introduction	1	No lab this week
	9	Cells & tissues	3, 23	
	13	Roots	24	Organs, cell types & tissues
	16	Stems	25	
	20	Secondary growth	26	Roots & stems
	23	Leaves	25	
	27	First land plants & Bryophytes	16	Secondary growth
	30	Bryophytes	16	Evolution project due this week
Feb	3	MIDTERM I		Leaves & modified plant organs
	6	First vascular plants	17	
	10	Lycophytes & equisetophytes	17	LAB EXAM 1
	13	Ferns	17	
	17-21	Reading Break		No labs this week
	24	Progymnosperms & first seed plants	18	Evolution, life cycles & bryophytes
	27	Cycads	18	
Mar	2	Ginkgo & conifers	18	Lycophytes & monilophytes
	5	Conifers	18	Bryophyte project due this week
	9	MIDTERM II		Gymnosperms
	12	Gnetophytes	18	
	16	Angiosperms - flowers	19, 20	Anthophytes I (flowers)
	19	Angiosperms - gametophytes	19, 20	
	23	Angiosperms - pollination	19	Anthophytes II (fruit & seed)
	26	Angiosperms - seed & fruit	20	Anthophyte project due this week
	30	Angiosperms - diversity	20	LAB EXAM 2
Apr	2	Summary		