

Plant Physiology (BIOC40H) Course Syllabus, Winter 2020

Lectures: Tuesdays, 10am till noon, Rm BV363

Course Personnel	Role	e-mail
Prof. Vanlerberghe	Instructor (<u>course content</u> , test and exam marking)	gregv@utsc.utoronto.ca
Avesh Chadee	Teaching Assistant (test and exam marking)	avesh.chadee@mail.utoronto.ca

Questions about course content?

If you have questions about the course content, the **instructor** is available to help you with this. The instructor has **office hours (in SY262) on Friday's from 9am till noon**. Please stop by during this time. Please note that the instructor can also provide brief answers to a few questions by e-mail (with about a 24 h turn-around) but it is ideal to see him in person during office hours. Please note that only the instructor should be contacted if you have questions about the course content.

Textbook

***Plant Physiology* 6th** edition by Taiz, Zeiger, Møller & Murphy; Sinauer Associates Inc., 2015. You can buy the text at the UTSC bookstore.

Note that each chapter of the textbook ends with a useful summary. Also, a useful glossary of terms is present at the end of the textbook.

The text also comes with a free companion web site at www.plantphys.net. This site includes special web essays and topics (that are also listed at the end of each textbook chapter), as well as sample questions. The instructor may occasionally make reference to material on the website.

Lecture Materials

All of the slides and any other material presented in lecture are posted on the **course page in Quercus**, usually prior to the lecture. **These materials are a guide to the topics being presented in class. You should supplement these materials with your own in-class note-taking.** The Quercus course page is also for other purposes such as **class announcements**.

Sample Questions

Each week, the instructor will also post sample questions. Use these to help review material and test your knowledge. Answers to the questions are posted one week later, along with a new set of questions.

Test and exam format

The tests and exam will include a mixture of question types including multiple choice, short answer, matching, drawing or labeling of diagrams, drawing, labeling and/or interpreting graphed data etc.

Material to be tested

You will be tested on the topics and material that is presented in class, as well as that which is assigned (i.e. take-home lectures 1 and 2). All lecture slides will be posted on Quercus and should be considered your master outline of the topics and material presented. The lectures are largely based on material in the required text so the text is an important resource to help you develop your understanding of the material presented in class.

**Course Lecture Topics
(in their order of presentation)**

Key Textbook Chapters

Section I

Unique features of the
plant body and the plant cell

Selective coverage of Chapter 1
(plus take-home lecture 1)

Section II

Biochemical and physiological
aspects of photosynthesis

Selective coverage of Chapters 7,8,9
(plus take-home lecture 2)

Section III

Water, mineral nutrients,
and products of photosynthesis:
acquisition, assimilation and transport

Selective coverage of Chapters
3-6,10,11,13

Section IV

Plant growth and cell walls

Selective coverage of Chapter 14

Section V

Plant photobiology

Selective coverage of Chapter 16,18,10

Section VI

Coordination of growth, development and
stress acclimation by plant hormones

Selective coverage of Chapter 15,17,18

Section VII

Internal and external controls of flowering

Selective coverage of Chapter 20

Method of Evaluation	Date	% of Final Grade	Material To Be Tested
Term Test 1 ^a	to be announced ^b	25%	Approximately lecture hours 1-8 and take-home lecture 1 (exact coverage to be announced)
Term Test 2 ^a	to be announced ^b	25%	Approximately lecture hours 9-16 and take-home lecture 2 (exact coverage to be announced)
Final Exam	to be announced ^b	50%	All material from the course, but with an emphasis on the materials not yet tested.

Please note that there is **no make-up test** if you miss a term test.

^a If you miss a term test and **provide appropriate documentation for having missed the test**, then the final exam will automatically be worth 75% of your final grade. Proper documentation must be submitted to Jennifer Campbell (SW421D; jennifera.campbell@utoronto.ca; [416] 287-7404) within 5 business days of having missed the test. This documentation will be confirmed.

^b The dates of the term tests and final exam will not yet be known at the beginning of term, but these dates will be announced in class and on the course page (Quercus) as soon as they are known. Please note that these tests and exam may be scheduled for an evening or on a Saturday.