

# **Plant Physiology (BIOC40H)**

## **Course Syllabus, Winter 2016**

**Lectures:** Tuesdays, 10am till noon, Rm HW408

<b>Course Personnel</b>	<b>Role</b>	<b>e-mail</b>
Prof. Vanlerberghe	Instructor ( <u>course content</u> , test and exam marking)	<a href="mailto:gregv@utsc.utoronto.ca">gregv@utsc.utoronto.ca</a>
Nicole Alber	Teaching Assistant (test and exam marking)	<a href="mailto:nikki.alber@utoronto.ca">nikki.alber@utoronto.ca</a>

### **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 more 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.

### **Questions about other aspects of the course?**

If you have a question regarding an administrative matter related to the course (eg. missed exam, exam schedule, exam conflict, exam viewing and return, exam mark), please contact the **instructor**.

## **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](http://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 will be posted on a **course page in Blackboard**, usually prior to the lecture. **These materials are meant as a guide to the topics being presented. You should supplement these materials with your own in-class note-taking.** The Blackboard course page will also be used for other purposes such as **class announcements**.

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

<sup>a</sup> Please note that there is **no make-up test** if you miss a term test. If you miss a term test and **provide appropriate documentation to the instructor for having missed the test**, then the other term test will automatically be worth 50% of your final mark.

<sup>b</sup> 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 (Blackboard) as soon as they are known. Please note that these tests and exam may be scheduled for an evening or on a Saturday.

### **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. All lecture slides will be posted on Blackboard 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