

Please Note: This *Course Syllabus* is an important step in updating the format of our distance courses. If for any reason the *Course Syllabus* does not match the print *Course Guide* or online course information, the *Course Syllabus* shall be taken as correct.

## COURSE SYLLABUS

<b>COURSE TITLE:</b>	Applied Botany	<b>TERM:</b>	Term 3 2012_13
<b>COURSE CODE:</b>	HORT 13.6	<b>DELIVERY:</b>	PHC
<b>COURSE CREDITS:</b>	6		
<b>COURSE SECTION:</b>	W03 or W07		

### Course Description

Basic plant anatomy at the cellular level and whole organ level is covered as well as the processes of photosynthesis and respiration. Thorough coverage is given to plant classification and naming, with botanical grammar being stressed. Plant hormones, pollination, fruit set and ripening are discussed. Basic propagation is addressed and comprehensive coverage is given to climatic factors of importance to prairie horticulture. The course concludes with a discussion of diseases of significance to prairie horticulture.

### Course Objectives

Applied Botany is a course of study designed to relate the basic questions of botany to the practical questions faced by many horticulturists. Wherever possible, the course will attempt to bridge the gap between issues of botany and the “real world” where plants and people interact. As an introductory course, *Applied Botany* acts as a foundation to many of the other courses in the Certificate Program.

### Course Overview

You will learn the structural characteristics used to distinguish and identify plants with an account of plant anatomy. From here the function of organs such as roots, stems, leaves and flowers can be understood. As well the various horticulturally important structures such as bulbs, rhizomes and corms and tubers will be presented. A self-study laboratory on plant anatomy and variation will be presented in which you are asked to purchase a specific array of fresh fruits, vegetables and flowers from a supermarket and make drawings to demonstrate your understanding of plant anatomy.

Basic physiological processes which are essential to plant growth and development will be presented, with the role of plant growth regulators being discussed. In addition, because of the significant limitations presented to horticulture by the severe prairie climate, this class will closely address the relationship of plants to the environment, with a focus on those factors significant on the Prairies.

Various propagation techniques will be outlined, with this section being built upon earlier discussion of plant anatomy, growth and growth regulation. If you do not plan to take the advanced course in propagation, *Applied Botany* should provide you with a good basic understanding of propagation.

Finally, concepts in plant pathology, entomology and weed science will be presented to help you understand some of the various pests that horticultural plants may encounter.

## Your Instructor

### Contact Information

Maureen Troesch

Phone: 306-668-5509. Available weekdays from 6:00 to 9:00 PM CST Mondays through Friday or leave a message.

Your instructor will be contacting you via messages (course mail) early in the term. Please reply to their initial contact. They may follow up with a phone call.

### Profile

Maureen Troesch graduated from the University of Saskatchewan's College of Agriculture with a B.Sc. Ag. in horticulture in 1995. She has been working in agricultural research on various projects since finishing university, but gardening remains her first love. She has been an instructor with this course since 1999.

## Optional Resources

### Textbooks

If you wish to purchase a textbook for the course, the following two are ideal, but optional.

Capon, Brian 2010. *Botany for Gardeners: An Introduction and Guide*. Timber Press, 3<sup>rd</sup> Edition. Portland Oregon. 268 pp. ISBN-10: 160469095X

Preece, J.E. and Read, P.E. 1993. *The Biology of Horticulture: An Introductory Textbook*. John Wiley & Sons, Inc. Toronto. 480 pp. ISBN 0-471-05989-7.

Textbooks are available from the University of Saskatchewan Bookstore:

[www.usask.ca/consumer\\_services/bookstore/textbooks](http://www.usask.ca/consumer_services/bookstore/textbooks)

### Other Required Materials

In addition to the Course Guide materials, you will need access to a good dictionary (they are available in libraries so you don't need to buy one) and access to a number of general botany books to complete the assignments.

## Supplementary Resources

There is a wealth of information on the Internet. This can be an excellent resource but please do not fall into the trap of believing everything published on the Internet. Use a critical eye when evaluating this information. University, Government and horticultural society links will be the most reliable. Remember that Wikipedia can be edited by anyone.

## Course Schedule

Week	Module	Readings/Activities	Evaluation
1	1&2	Appendix A	
2	3		Assignment 1 Due: Apr. 8
3	4		
4	5		Assignment 2 Due: Apr. 22
5	6	Additional reading as required for assignment 3	
6	7		
7	8		
8&9		Complete final assignment; review and exam preparation	Assignment 3 Due: May 13
10	FINAL EXAM		June 1

*Note: If for any reason the Course Syllabus Reading List does not match the Module Reading List, the Course Syllabus shall be taken as correct.*

## Grading Scheme

Assignment #1	10%
Assignment #2	20%
Assignment #3	30%
Final Exam (open book)	40%
Total	100%

Information on literal descriptors for grading at the University of Saskatchewan can be found at: <http://students.usask.ca/current/academics/grades/grading-system.php>

Please note: There are different literal descriptors for undergraduate and graduate students.

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at: [http://www.usask.ca/university\\_secretary/council/academiccourses.php](http://www.usask.ca/university_secretary/council/academiccourses.php)

The University of Saskatchewan Learning Charter is intended to define aspirations about the learning experience that the University aims to provide, and the roles to be played in realizing these aspirations by students, instructors and the institution. A copy of the Learning Charter can be found at: [http://www.usask.ca/university\\_secretary/LearningCharter.pdf](http://www.usask.ca/university_secretary/LearningCharter.pdf)

## Evaluation Components

### Assignment 1 (located under Assignments in the course menu)

**Value:** 10% of final grade

**Due Date:** April 8, 2013

**Purpose:** Translation of plant names to demonstrate that you know how they were arrived at, and what they mean. You will also be marked on the correct use of botanical grammar.

**Description:** Use a comprehensive English dictionary to translate 14 scientific plant names to English.

### Assignment 2 (located under Assignments in the course menu)

**Value:** 20% of final grade

**Due Date:** April 22, 2013

**Purpose:** This assignment deals with botanical structures, and is intended to give the student a hands-on appreciation for plant anatomy. It will require you to visit your local grocery store to purchase some common items.

**Description:** To complete the assignment, each student will be asked to purchase a selection of common fruits, vegetables and flowers available at most major supermarkets. These structures will then be dissected and simple line drawings made to demonstrate the different parts that are being examined.

**Submitting Assignment # 2:** To submit Assignment 2 please scan or take photos of your drawings in order to use the assignment submission tool. As a last resort you can fax this assignment but clarity will be an issue and your mark may be affected.

### **Assignment 3 (located under Assignments in the course menu):**

**Value:** 30% of final grade

**Due Date:** May 13, 2013

**Purpose:** The student will demonstrate their knowledge of the course concepts by applying them to a specific horticulture plant of their choosing. Students are encouraged to problem solve, intelligently discuss concepts and/or describe the interconnectedness of relevant botanical concepts rather than list facts about their selected plant.

**Description:** Select a plant that interests you, where the reading and research you do can be applied to a personal or commercial interest. For example, the strawberry would be an ideal subject for someone intending to establish a commercial strawberry plantation. An elm tree might be a good subject for a person employed in the pruning division of a city parks department. You may choose any plant that falls into the realm of horticulture — a paper on wheat or barley would not be accepted. However, a paper on any wildflower, medicinal plant, houseplant, fruit, vegetable or ornamental plant is acceptable.

### **Final Exam (Closed book):**

**Value:** 40% of final grade

**Date:** June 1, 2013 (Deadline to apply for final exam is April 15)

**Description:** The final exam will consist of fill in the blank questions where the correct word must be supplied to complete the sentence as well as multiple choice questions where students will choose the best answer from those provided. It will also include short answer questions where you will have to solve and explain problems based on botanical knowledge. It will cover material from all modules, with slightly heavier weighting on material that has not already been stressed on previous assignments. The exam is closed book, so you may not bring any additional written materials into the examination room.

**Note: Students must apply to write the final examination.** The application form can be found in the course menu.

Final Examinations will be held at selected centres throughout the prairies. These selected centres are classified as "regular" centres. Regular centres will be established at sites where there is a large concentration of students in the surrounding area. No fee will be charged for writing a final examination at a regular centre.

If you are unable to write the final examination at a regular centre, you may apply for establishment of a "special" centre and will be responsible for making your own arrangements to write the examination under the supervision of an approved invigilator. You will be responsible for any financial reimbursement that might be required.

**Further information regarding final examination sites, forms and how to apply for establishment of a special centre is located in our handbook**

### **Submitting Assignments**

To obtain your best mark, you should complete all assignments and attempt all questions in each assignment in the course. If you know only part of the answer, put it down and you may receive partial marks. Remember, instructors find it very easy to mark a question that has not been attempted.

**You are expected to submit assignments by the due dates indicated in your Course Syllabus.** The instructor has the discretion to penalize late submissions or not. Assignments submitted beyond the final exam date may or may not be accepted by the instructor. If you experience legitimate problems such as accident or family illness, discuss it with your instructor so that some suitable arrangement can be worked out.

**Before submitting any assignment, ensure to save a backup copy of it in case the original is lost.**

All of the assignments are located under assignments in the course menu .

Please submit all assignments online, using the Assignments tool in Blackboard.

**Assignments Tool in Blackboard:**

1. From the Course Home Page, on the left menu click Assignments.
2. On the Assignments page, click the Assignment you want to submit and download any attached files.
3. In the Upload Assignment area, key in the Assignment Materials text box or attach your file. Note the file naming rules.
4. Add any Comments for your instructor.
5. Click Submit to submit the assignment.
6. Review Submission History that appears after you Submit. Click OK if you need to go back and revise.

**For Further Information about Using the Blackboard Assignments Tool:**

1. From inside Blackboard, click on the Help tab to see U of S Course Tools/BBLearn 9.
2. On the tool bar under Course Tools, click the Students' Help tab and then click one of the following options:
  - Videos and then click Working with Assignments (2 min 59 sec video).
  - Course Tools Help Documents and click Working with Assignments (a pdf document)
  - FAQs

Faxed Assignments:

**Be sure to indicate the course name, your section number and the assignment number on the cover page with your name and address.** The instructor will put your grade and comments under My Grades in the course menu

## Checking Your Assignment Grades

1. From the Course Home Page, on the left menu click My Grades.
2. To see the grade for the specific assignment, click on the assignment grade.
3. View the details of your grade and any instructor comments.

The following criteria are considered in grading assignments and the final examination:

- Demonstrated analytical/critical insight ability
- Evidence of appropriate level of understanding of course content
- Breadth/depth of coverage of the question/s
- Assignment organization
- Syntax, technical errors, clarity of expression

## Integrity Defined

Integrity is expected of all students in their academic work – class participation, examinations, assignments, research, practica – and in their non-academic interactions and activities as well.

### What academic integrity means for students

- Perform your own work unless specifically instructed otherwise. Check with your instructor about whether collaboration or assistance from others is permitted.
- Use your own work to complete assignments and exams.
- Cite the source when quoting or paraphrasing someone else's work. Discuss with your professor if you have any questions about whether sources require citation.
- Follow examination rules.
- Discuss with your professor if you are using the same material for assignments in two different courses.
- Be truthful on all university forms.
- Use the same standard of honesty with fellow students, lab instructors, teaching assistants, sessional instructors and administrative staff as you do with faculty.

### Integrity in non-academic activities

Misconduct that disrupts the activities of the university or harms the legitimate interests of the university community could be the cause for non-academic disciplinary action.

## Guiding Principles

The university documents that lay out our rules and procedures are the **Student Academic Misconduct Regulations** (University Council) and the **Standard of Student Conduct in Non-Academic Matters** (University Senate). Both documents are based on the same Guiding Principles:

- Freedom of Expression
- Mutual Respect and Diversity
- Commitment to Non-violence
- Commitment to Justice and Fairness
- Security and Safety
- Integrity

### **Academic Misconduct Procedures**

“Academic Misconduct” is the term the University uses to describe cheating. Types of cheating are listed in the Student Academic Misconduct Regulations of University Council. There is an onus on every student to become informed about academic misconduct.

When an instructor believes a student is guilty of academic misconduct, the following procedures are used:

#### **Informal procedure:**

Sometimes misconduct is the result of carelessness, misunderstanding of the rules, or miscommunication. In such cases, the instructor may discuss the matter with the student informally.

If the student concedes the misconduct, the instructor has the authority to impose one or more of the following penalties:

- reduce the grade on the assignment or exam, to as low as zero
- require the student to rewrite the assignment or exam.

A penalty imposed by an instructor is not reported to the student’s college and does not become part of the student’s record.

A student who disagrees with the allegation of cheating or with the penalty imposed may request a formal hearing.

#### **Formal procedure:**

For more serious misconduct, or in cases where the student disputes the allegation or the penalty, a college hearing board will hear the matter. Procedures for hearings are described in the Regulations.

The hearing board has the authority to impose one or more of the following penalties:

- reprimand or censure the student
- reduce the grade on the assignment, exam, or entire course, to as low as zero
- require the student to rewrite the assignment or exam
- require the student to submit an essay or a presentation on academic misconduct
- suspend or expel the student
- postpone, deny or revoke the student degree, diploma or certificate

A penalty imposed by a Hearing Board is reported to the student's college and to the university, and becomes part of the student's record. A finding of misconduct in research funded by an external agency is reported to that agency.

Further appeal of a hearing board decision or penalty is permitted only on grounds of unfair procedure or new evidence.

**For More Information**

Integrity and Student Conduct website:

[http://www.usask.ca/university\\_secretary/honesty/](http://www.usask.ca/university_secretary/honesty/)

*Date: Effective January 1, 2010*

## **Acknowledgements**

### **Course Authors**

Brian Baldwin, M.Sc., University of Saskatchewan

### **Instructional Design and Course Development**

#### **Instructional Designers and Technologists:**

Dirk Morrison, M.Sc

Jordan Epp

Robb Larmer

#### **Support Staff:**

Cindy Klassen

Diana Hebig