

## COURSE OUTLINE

BIO 1167 - Botany

Fall 2021

Lethbridge College inspires and facilitates learning and innovation to meet economic and social needs.

<b>Centre:</b> Technology, Environment & Design	<b>School:</b> School of Agriculture Sciences
<b>Instructor:</b> Mark Klassen Office: CB 3003 Email: <a href="mailto:mark.klassen@lethbridgecollege.ca">mark.klassen@lethbridgecollege.ca</a>	<b>Instructor Availability:</b> Online: Times posted in Canvas Face to Face: TBD – See CANVAS
<b>Instructor:</b> Cherie Yoshioka Office: CB3025 Email: <a href="mailto:Cherie.yoshioka@lethbridgecollege.ca">Cherie.yoshioka@lethbridgecollege.ca</a>	<b>Instructor Availability:</b> By appointment
<b>Delivery Method:</b> Blended Lectures (3hrs/wk) Lab (2hrs/wk)	<b>Class Time &amp; Location:</b> View your personal class schedule (days, times, rooms) through the myHorizon portal or on Canvas.
<b>Credits:</b> 3	<b>Pre-Requisites:</b> NO <b>Co-Requisites:</b> BIO-1167L
<b>Open to Supplemental Exam:</b> N  <b>Research Component:</b> N	<b>Program Chair:</b> Byrne Cook <b>Associate Dean:</b> Candace Lewko <b>Dean:</b> Dr. Terry Kowalchuk <b>Main Program Contact:</b> 403-382-6991

### Academic Calendar Description:

An introduction to plant evolution and diversity with a focus on angiosperms (flowering plants). Emphasis is on plant anatomy, physiology and the effects of abiotic and biotic factors on plant growth and development.

### Course Outcomes:

1. Describe the functional and adaptive significance of plant cells, tissues and organs
2. Illustrate the evolutionary origin and the major phylogenetic branches of plants
3. Outline the mechanisms involved in the movement of water and organic matter in plants
4. Describe biotic and abiotic factors that affect plant growth and development
5. Compare and contrast the processes of photosynthesis and cellular respiration in plants
6. Explain basic principles of genetics relating to plant propagation and survival

### Course Assessments:

<b>Assessment (Assignment or Exam)</b>	<b>Value</b>	<b>Due (week of)</b>
Botany in the News	4%	TBD
Botanical Collection	8%	Oct. 10 <sup>th</sup> .
Lab and/or Field Work Assignments	14%	TBD
Lab quizzes	12%	Weekly
Lab Exam 1	6%	Oct. 10 <sup>th</sup>
Lab Exam 2	6%	Dec. 5 <sup>th</sup>
Exam #1	15%	Oct. 3 <sup>rd</sup>
Exam #2	15%	Oct. 31 <sup>st</sup>
Final Exam	20%	Dec. 12 <sup>th</sup> .

#### **Penalties/Notes about Late Assignments:**

Late assignments are subject to a 10% grade deduction per day penalty to a maximum of 5 days or 50%. After 5 days, the assignment will be graded as 0. Missed in-class assessments will receive a grade of 0. Make up or supplement assessments are at the discretion of the instructor.

Field studies are a mandatory course requirement for courses that have field study components. Failure to participate may result in an F in the course.

#### **Grading System:**

<b>Grade</b>	<b>Percent</b>	<b>Grade Point</b>	<b>Explanation</b>
A+	95 – 100	4.0	EXCELLENT
A	90 – 94	4.0	EXCELLENT
A-	86 – 89	3.7	EXCELLENT
B+	80 – 85	3.3	GOOD
B	76 – 79	3.0	GOOD
B-	70 – 75	2.7	GOOD
C+	67 – 69	2.3	SATISFACTORY
C	63 – 66	2.0	SATISFACTORY
C-	60 – 62	1.7	SATISFACTORY
D+	55 – 59	1.3	MINIMAL PASS
D	50 – 54	1.0	MINIMAL PASS
F	0 – 49	0.0	FAILURE

#### **Grading:**

Official final grades will be available on [Web Advisor](#). Grades posted in Canvas should be considered interim grades.

*Note:* Grade Point Average (GPA) is the standard average measure of performance. Term GPA is an average of the grade points earned in all classes for that term and determines academic standing from term to term. Maintaining the Term GPA required for your program allows for progression in your program. Program GPA is the average grade points earned in all courses required for your program. Successfully meeting the Program GPA required is one criterion for graduation eligibility. To learn more about GPA contact Career & Academic Advising.

### **Program/Course Attendance Requirements:**

Regular attendance and participation in lectures is expected in order to be successful in this course. The responsibility for obtaining materials from missed classes is on the student. There is no obligation for the instructor to provide them.

Participation in labs is required. Failure to attend 3 labs, unexcused and not made up, may result in an F in the course.

### **General Course Expectations:**

Use of electronic devices for non-class activities during lecture or lab sessions is not permitted and students may be asked to leave if it is disruptive to the learning environment.

Unless otherwise specified in assignment details, it is expected that students submit their own original works. Students are aware and comply with Institutional Policies and Procedures (i.e., Student Rights and Code of Conduct, see below).

Open communication is important to address issues in a timely manner. Students are expected to contact their instructor prior to any absences or as soon as possible after the absence. If students do not understand instructions or material being presented, it is their responsibility to seek help and/or clarification.

If applicable, students will adhere to any site requirements for Personal Protective Equipment (e.g., lab coats, safety glasses, closed toed shoes, etc.) or field conditions (e.g., rain gear, waders, work boots, etc.).

### **Instructional Method:**

Blended (Face-to-Face and Online) – Portions of this course may be delivered online.

- This instructor will not tolerate academic dishonesty. This includes cheating on quizzes or exams, plagiarizing on assignments, projects, or reports, and copying other's work.

- Every student must attend the lab session she/he is registered in. Attendance at another lab session will only be permitted under special circumstances and need to be approved by the instructor.

- Missed assignments or quizzes will only be available for make-up with written notification via email to the instructor with an explanation the instructor deems reasonable (for example:

extended illness or injury, family emergency). Documentation may be required. Employment, business activities, and vacations are not acceptable excuses for missed quizzes or assignments.

- Exams will include material from all sources of information and course activities and are not confined to lecture and laboratory materials only. Some test questions may address topics not directly covered in class, to which the student will be expected to apply knowledge and skills gained in the course to provide an answer.

- Any lecture and lab schedules posted to CANVAS are tentative, and necessary changes may be made during the semester. Check CANVAS and your Lethbridge College email frequently for class information or updates.

### **Required Text(s), Materials, and Technology:**

*Botany: Custom Textbook BIO 1167 compiled from selected chapters of: Bidlack, & Jansky (2014) Stern's introductory plant biology (15<sup>th</sup>. ed.), Brooker, Widmaier, Graham and Stiling (2020) Biology (5<sup>th</sup> ed.), and Leviton, McMahon (2021) Plants and Society (8<sup>th</sup> ed.) New York: McGraw-Hill Publishing.*

Note: an e-text is also available for the above text.

Harris, J.G., & Woolf Harris, M. (2001) *Plant identification terminology: An illustrated glossary* (2<sup>nd</sup> ed.). Spring Lake, UT: Spring Lake Publishing.

Hand Lens  
Dissecting Kit

Note: Important Dates and Deadlines can be found on the [Lethbridge College website](#).

## **Student Resources**

### **Canvas:**

[Canvas](#) is the Learning Management System (LMS) used by Lethbridge College. All students at Lethbridge College have access to Canvas, where they will locate course resources such as course outlines, grades, course materials, Canvas Inbox, and learning activities. Canvas also has a mobile app.

### **Lethbridge College Email:**

[Lethbridge College email](#) is the main source of communication outside your individual courses. Be sure to access this often to ensure you have the most up-to-date information from across the campus.

### **Buchanan Library:**

Use the [Buchanan Library](#) in person or online to find research materials required for class assignments and to help you with your information needs. Access over 50 databases to find articles on almost any topic and use our online catalogue to find books, ebooks, videos, articles, and more. Our staff provides guidance on how to find the resources you require.

### **Learning Café:**

Students are encouraged to access the [Learning Café](#) in the Buchanan Library for various free services, including academic tutoring support (online and face to face), APA documentation and study skills workshops, peer tutoring, and [online learning resources](#).

### **Accessibility Services:**

Students requiring academic accommodation (e.g., extra time, separate space, etc.) must register with [Accessibility Services](#) to determine eligibility for and implementation of these supports. If you have further questions, please feel free to speak to your instructor or contact Accessibility Services for more information.

### **Health and Shepell Counselling Services:**

Our [Health Services](#) health care team of registered nurses, doctors, and psychiatrists are here to provide services that positively influence your health and well-being. Shepell offers a variety of services to help you meet the challenges of achieving your personal, professional, and academic potential. The primary form of support is personal counselling, which provides an opportunity to work collaboratively with a counsellor.

### **Advising:**

[Academic advisors](#) are a great place to start if you aren't sure where to go for help. They are experts on college policies, procedures, program requirements, academic planning, and student supports, and they can help you at any point in your college experience.

### **Full-class Testing Service:**

This course includes one or more exams/quizzes that will be written through Testing Services' full-class testing service. Rather than writing these tests during class time, you will have a window of time (typically 3–5 days) during which you will write your tests in the Testing Services' Satellite Lab. Go to [www.lethbridgecollege.ca/testing](http://www.lethbridgecollege.ca/testing) to book your exam appointment(s) within the dates provided by your instructor. It is strongly recommended that you book your appointment(s) well in advance. When booking your exam(s), select "Full-class Testing Service" as your exam group to make sure Testing Services can accommodate your booking. Please be aware of the testing [rules and regulations](#) prior to your exams.

### **Other Services:**

If you would like more information on the many services available to students, please check out the [Current Students](#) section of the Lethbridge College website.

## **Institutional Policies and Practices**

### **Course Work Used as Examples:**

Should your instructor wish to use your work in future educational purposes, you will be asked to complete and sign a Student Release Form, authorizing both the instructor and/or the College to use your course work. This form, along with a copy of your work, is retained in the official copyright files located in the College's Intellectual Property Office. If you have any questions regarding Copyright and/or Intellectual Property, please contact the Intellectual Property Office.

### **Retention of Assignments and Exams:**

Examinations/assignments will be retained by instructors to the end of the final grade appeal period. After the appropriate retention period, records will be destroyed in a secure manner. *Note:* Practicum course evaluations may be kept for a longer period of time. Please see the [Records Management policy](#) for more information.

**Student Rights and Code of Conduct:**

Academic Honesty is necessary for students to achieve excellence and for the preservation of the integrity and reputation of the course, the program, and of Lethbridge College as an institution. Lethbridge College supports and demands academic honesty in all academic learning activities.

Plagiarism is a serious offence and will be handled in accordance with Lethbridge College policy. The penalties for plagiarism vary in degrees but may result in expulsion from the Lethbridge College. For definitions of what is included as plagiarism and academic dishonesty, please view the [Student Rights and Code of Conduct policy](#).

**Recording of Classes:**

Audio/video recording is permitted *only* with the prior written consent of the instructor or if recording is part of an approved accommodation plan. Such a recording is for the personal use only of the student who has permission to record. Following the course all such recordings must be destroyed.

**Other Policies:**

Students should be aware of policies and procedures that may impact them directly. More information can be found on the Lethbridge [College Policies page](#).

**Important Notes about your Course Outline:**

Please retain a copy of this course outline for future reference. It can be useful in providing documentation for course transfer credit.

**Research Disclaimer:**

*Disclaimer:* This course does not include any research activities that involve human participants.

**Other Program Contacts**

To contact the Dean or Associate Dean for the program, please contact the main program phone number on page 1 of this outline.