

Course ID:	Course Title:	Winter 2017
Bot 203	Biology of Plants	Prerequisite: BIO 133
		Credits: 3

Class Information		Instructor Information		Important Dates	
Days:	Wed/Fri	Instructor:	Diane Edwards, BSc(Agr), MSc, PhD, PAg	First day of classes:	Wed., Jan 4, 2017
Time:	9:45 to 11 am	Email:	dedwards@ambrose.edu	Last day to add/drop, or change to audit:	Sun, Jan. 15, 2017
Room:	A2210	Phone:	403.305.5861	Last day to request revised exam:	Mon, Mar. 6, 2017
Lab/ Tutorial:	Wed: 1 pm to 3:45 in A2145	Office:		Last day to withdraw from course:	Fri, Mar. 17, 2017
		Office Hours:	By appointment	Last day to apply for coursework extension:	Mon, Mar. 29, 2017
Final Exam:	Saturday, April 22, 2017, 1-4 pm, A2133			Last day of classes:	Tue, April 11, 2017

Course Description

This course focuses on the plant – person interface, examining how plants have, are and will shape our lives and society. Through this lens students will explore plant biology (anatomy, morphology and physiology) and discover how plants fulfill their many roles in health, commercial products and the natural and urban environments.

Expected Learning Outcomes

It is the aim of the course that students acquire the following skills:

1. Recognize and characterize the main groups in the plant kingdom.
2. To examine the basic biology (anatomy, morphology and physiology) of key plant groups.
3. Discuss the roles of plants in (a) past, present and future societies and (b) the ecosystem
4. Develop and improve critical thinking and writing skills, and hone ability to analyze a complex topic from the plant science research literature.

Textbooks

Required: Capon, B. 2019. Botany for Gardeners. 3rd Edition. Timber Press.

Recommended: Levetin, E., McMahon, K. 2012. Plants & Society. 6th Edition. McGraw Hill. Available on reserve in the library.

Course Schedule (tentative)

#	Date	Topic	Text (pages)
1.	Jan 4	Introduction	BC: 11-13
2.	Jan 6	What is a plant / Role of plants	BC: 15-17
3.	Jan 11	The Plant Cell	BC: 18-26
4.	Jan 13	Plant body – Tissues and organs	BC: 37-89
5.	Jan 18	Plant Physiology moving water, nutrients	BC: 145-189
6.	Jan 20	Plant physiology 2 – sugars, photosynthesis	
7.	Jan 25	Plant physiology-respiration	
8.	Jan 27	Plant Life Cycles – flowers	BC: 195-215
9.	Feb 1	Plant Life Cycles - fruits and seeds	BC: 215-221, 26-
10.	Feb 3	Plant Genetics	36, 222-239
11.	Feb 8	Review	
12.	Feb 10	Midterm	
13.	Feb 15	Plant Systematics & evolution, Plant adaptation	BC: 242-246, 93-
14.	Feb 17	Diversity of Plant Life – lower plants, ferns, gymnosperms	141,
	Feb 22 Feb 24	Break – no class	
15.	Mar 1	Origins of Agriculture	LM: 172-180
16.	Mar 3	Grasses and grains	LM: 183-202
17.	Mar 8	Legumes and starches	LM: 205-231
18.	Mar 10	Feeding a hungry world, Sustainable Agriculture, New Tech	LM:233-260
19.	Mar 15	Simulating Beverages, herbs and spices	LM:261-292
20.	Mar 17	Cloth, paper and wood	LM:296-320
20.	Mar 22	Medicinal Plants	LM:231-240
21.	Mar 24	Psychoactive, poisonous and allergy plants (in RE 146)	LM:341-360
22.	Mar 29	No Class	
23.	Mar 31	Plant Ecology	LM: 463-483
24.	Apr 5	Ornamental Plants	
25.	Apr 7	Review	

BC: Botany for Gardeners, L&M: Plants & Society

Labs (tentative)

Date	Topic	Amount
Jan 4	Lab 1. Reflective writing assignment Paper Writing 1. Topic Selection, Journals, Paper structure	2
Jan 11	Lab 2. Supermarket Botany (complete exercise prior to lab) Paper Writing 2. Thesis statement, citations, body	1
Jan 18	Lab 3. Plant Cell – Sectioning	2
Jan 25	Lab 4. Paper Writing 3. Peer review – Thesis statement, citations	2
Feb 1	Lab 5. Simple tissues and staining	2
Feb 8	Lab 6. Plant Architecture	2
Feb 15	Lab 7. Flowers and Fruit	2
Feb 22	Family Day no lab	

Mar 1	Lab 8. Paper Writing 4. Review of developed draft by staff of the writing centre.	2
Mar 8	Lab 9. Plant Taxonomy	2
Mar 15	Lab 10. TBA	
Mar 22	Lab 11. Paper Writing 5. Peer review of paper.	2
Mar 29	No Lab	
April 5	Lab 12. Field Trip – Ambrose Eco-reserve	1

Requirements:

Learning from the lectures will be evaluated using one in class midterm (20%) and a final exam (35%). Exams will mainly consist of short answer questions.

Learning in the labs will be evaluated through hand-in assignments (9 x 2% + 2 x 1% = 20%), normally due at the end of the lab session.

Review paper: Thesis statement/citations (3%), draft (7%) and final review paper (15%) will be submitted via Moodle. Content will be evaluated with a rubric supplied to students in advance. The academic integrity of the final version of the review paper will be assessed by submission to **Turnitin**.

Attendance:

Attendance of lectures will help ensure success on course exams and assignments. Attendance is compulsory for all laboratory exercises, presentations and exams. Allocated marks will not be awarded if a student is absent from any laboratory, presentation or exam without notice and sufficient reason.

Grade Summary:

The available letters for course grades are as follows:

<u>Letter Grade</u>	<u>Description</u>	<u>Percentages %</u>	<u>Letter Grade</u>	<u>Description</u>	<u>Percentages%</u>
<u>A+</u>		<u>90-100</u>	<u>C+</u>		<u>64-66</u>
<u>A</u>	<u>Excellent</u>	<u>85-89</u>	<u>C</u>	<u>Satisfactory</u>	<u>60-63</u>
<u>A-</u>		<u>80-84</u>	<u>C-</u>		<u>56-59</u>
<u>B+</u>		<u>75-79</u>	<u>D+</u>		<u>53-55</u>
<u>B</u>	<u>Good</u>	<u>71-74</u>	<u>D</u>	<u>Minimal Pass</u>	<u>50-52</u>
<u>B-</u>		<u>67-70</u>	<u>F</u>	<u>Failure</u>	<u>Below 50%</u>

Other:

Ambrose University Academic Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devices in class. The professor has the right to disallow the student to use a

laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.