



BOT 203

Biology of Plants

Semester: Winter, 2015

Days: Tu/Th 9:45 to 11 am

Room: A2212

Lab – day: Mon 3:30 to 5:30 pm

Lab–Room: A2145

Number of credits: 3

Prerequisite:

Biology 131

Biology 133

Instructor: Dr. Diane Edwards

Email: dedwards@ambrose.edu

Phone: 403-410-XXXX

Office: L2XXX

Hours: By appointment

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 we 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.

Further Course Information:

Field trips will occur during labs which may necessitate travel, Entry fee to the zoo may apply.

Supplemental readings and videos will be assigned.

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

Important Dates:

First day of classes: January 7, 2015

Registration revision period: January 18, 2015

Last day to request revised examination: March 2, 2015

Last day to withdraw from course: March 20, 2015

Last day to apply for time extension for coursework: March 30, 2015

Last day of classes: April 10, 2015

Final Exam: April XX, 2015

Time: 9:00 AM – 12:00 PM

Room: Room number

research literature.

Outline:

Lecture (tentative) 36 hours

Date	Topic	Text (chapter)
Jan 8	Introduction	1
Jan 13	What is a plant / Role of plants	1
Jan 12	The Plant Cell	2
Jan 20	Plant body – Tissues and organs	3
Jan 22		
Jan 27	Program day	
Jan 29	Plant Physiology moving water, nutrients,	4
Feb 3	Plant physiology 2 – sugars, photosynthesis,	4
Feb 5	Midterm 1	
Feb 10	Plant physiology-respiration	4
Feb 12	Plant Life Cycles - flowers	5
Feb 17 Feb 19	Break – no class	
Feb 24	Plant Life Cycles - fruits and seeds	6
Feb 26		
Mar 3	Plant Genetics, Plant Systematics & evolution	7,8,9
Mar 5		
Mar 10	Midterm 2	
Mar 12	Diversity of Plant Life – lower plants, ferns, gymnosperms	9,10
Mar 17	Origins of Agriculture	11
Mar 15		
Mar 24	Grasses and grains	12
Mar 26	Legumes and starches;	13,14
Mar 31	Feeding a hungry world, Sustainable Agriculture	15
Apr 2		
Apr 7	Medicinal Plants	19
Apr 9	Psychoactive, poisonous and allergy plants;	20,21

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Lab (tentative) 24 hours

Date	Topic	Location
Jan 12	Lab 1. Supermarket Botany (complete exercise prior to lab)	Supermarket / Ambrose
Jan 19	Lab 2. Plant Cell - sectioning	Ambrose
Jan 26	Lab 3. Simple tissues and staining	Ambrose
Feb 2	Lab 4. Plant Architecture	Ambrose
Feb 9	Lab 5. Open Lab for Paper	Ambrose
Feb 16	Break no lab	
Feb 23	Lab 6. Flowers and fruit	Ambrose
Mar 2	Lab 7. Plant taxonomy	Ambrose
Mar 9	Lab 8. Lab Quiz /	Ambrose
Mar 16	Lab 9. Field Trip- SAIT greenhouse and chef	SAIT
Mar 23	Lab 10. Field Trip – Devonian Garden and florist	CORE
Mar 30	Lab 11. Field Trip – Ambrose Eco-reserve	Ambrose Campus
April 6	Easter, No lab	
April 7	Lab Assignments due	

Review Paper 30%

Date	Topic	Amount %
Jan 29	Thesis statement and 3 references (1 review, 2 research papers)	3
March 5	Draft outline	7
April 10	Final Paper due	20

Requirements:

Learning from the lectures will be evaluated using two in class midterms and a final exam. Exams will mainly consist of short answer questions.

Learning in the labs 1-6 will be evaluated using a lab quiz, learning in labs 7-10 will be evaluated through a hand in assignment.

Review paper: Thesis, statement, draft and final review paper will be evaluated with a rubric supplied to students in advance.

Submission of Assignments:

All components of the review assignment will be submitted via email by 9 am on date they are due.

Lab Assignments will be submitted via email by 9 am April 7, 2015.

Late assignments will be penalized 1% per day.

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.

Evaluation:

	Amount	Date Due
Review Paper - thesis	3%	Jan 29
Midterm exam 1	15%	Feb. 5
Lab Quiz	5%	March 2
Review Paper – draft	7%	March 5
Midterm exam 2	15%	March 12
Lab Assignments	5%	April 7
Review Paper	20%	April 10
Final lecture exam	30%	TBA

Grade Summary:

The available letters for course grades are as follows:

Letter Grade	Description	Percentages %	Letter Grade	Description	Percentages%
A+		92-100	C+		64-66
A	Excellent	85-91	C	Satisfactory	60-63
A-		81-84	C-		56-59
B+		75-80	D+		53-55
B	Good	71-74	D	Minimal Pass	50-52
B-		67-70	F	Failure	Below 50%

Textbooks:

Levetin, E., McMahon, K. 2012. Plants & Society. 6th ed. MCGraw Hill.

Policies:

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, it is highly recommended that they forward all messages from the Ambrose account to the other account.

During the **Registration Revision Period** students may to 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. These courses will not appear on the student's transcript. 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 by the **Withdrawal Deadline**, please consult the List of Important Dates. Withdrawal from courses after the Registration Revision period will not be eligible for tuition refund. A grade of "W" will appear on the student's 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.

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) 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 engage in electronically-enabled activities unrelated to the class during a class session. Please turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Please 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. 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, that is information about an individual that may be used to identify that individual, may be collected as a requirement 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 Office of the Registrar in writing 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 to review final grades. 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 College 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 give credit 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.

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

Other

None