

Course ID:	Course Title:	Winter 2023
BIO 133	Introduction to Plant and Organismal Biology	Prerequisite:
		Credits: 3

Class Information		Instructor Information		Important Dates	
Delivery:	In Class	Instructor:	Damilola Adingupu	First Day of Class:	10 th Jan 2023
Days:	Tue, Thur	Email:	Dami.adingupu@ambrose.edu	Last Day to Add/Drop:	Jan. 22
Time:	9:45 AM - 11:00 AM	Phone:		Last Day to Withdraw:	March 31
Room:	A2133	Office:	L2180	Last Day to Apply for Coursework Extension:	April 3
Lab/Tutorial:	Mon 8:15 AM - 11:15 AM OR 11:45 AM - 2:45 PM A2151	Office Hours:	By appointment	Last Day of Class:	April 14
Final Exam:					

Important Dates and Information

For a list of all important dates and information regarding participating in classes at Ambrose University, please refer to the Academic Calendar at <https://ambrose.edu/academic-calendar>.

Course Description

This course will comparatively survey the structure prokaryotic organisms and the major organ systems of eukaryotic organisms - including vertebrate and invertebrate animals, plants, protists, viruses, and fungi. It will also discuss the ecological principles of organismal survival and interactions. All topics have an evolutionary foundation.

This course consists of 2.5 hours of lectures per week, plus a 2.5 hour lab.

Expected Learning Outcomes

1. Students will gain a greater understanding of fundamental biological principles.
2. Students will be able to discuss the anatomy and physiology of many animal systems including circulation, digestion, reproduction, and the nervous system, as well as understanding the anatomy and physiology of plants, fungi, and protists. The topics will be interrelated with an ecological focus.
3. Students will learn laboratory techniques essential to research in biology-related fields.
4. Students will collaborate with peers to design and carry out a research project and be able to present this in written and oral formats.

Textbooks

Fenton/Russell - Exploring the Diversity of Life, 2022. Biology, 5'th Canadian edition. Nelson Education.

Course Schedule

Date	Lecture/ lab Schedule	Textbook Chapter, page
Tues 10 th Jan	Intro to Bio 133. Evolution, Taxonomy and Phylogeny Part 1	16, 407 - 426
Thurs 12 th Jan	Evolution, Taxonomy and Phylogeny Part 2	19, 471 - 495
Mon 16 th Jan	Lab 1: Evolution and Natural Selection	
Tues 17 th Jan	Evolution, Taxonomy and Phylogeny Part 3	19, 471 - 495
Thurs 19 th Jan	Diversity of life: Fungi Part 1	22, 547
Mon 23 rd Jan	Lab 2: Microscope use and Scientific Drawing	
Tues 24 th Jan	Diversity of life: Fungi Part 2	22, 547
Thurs 26 th Jan	No class Program Day	
Mon 30 th Jan	Lab 3: Fungi	
Tues 31 st Jan	Plants Part 1	23, 572
Thurs 2 nd Feb	Plants part 2	23, 572
Mon 6 th Feb	Lab 4: Plant Diversity	
Tues 7 th Feb	Midterm 1	
Thurs 9 th Feb	Animal Diversity 1	24, 604
Mon 13 th Feb	Lab 5: Diversity of Life; Learning revision to date	
Tues 14 th Feb	Animal Diversity 2	24, 604
Thurs 16 th Feb	Animal Diversity 3	24, 604
Mon 20 th Feb	Family Day No class	
Tues 21 st Feb	Reading Week No class	
Thurs 23 rd Feb	Reading Week No class	
Mon 27 th Feb	Lab 6: Group Presentation	
Tues 28 th Feb	Animal Diversity 4	24, 604
Thurs 2 nd March	Animal Diversity 5	24, 604
Mon 6 th March	Lab 7: Biodiversity Hike	
Tues 7 th March	Introduction to Animal Organization and Physiology	35, 925
Thurs 9 th March	Selected Organ System: Respiratory system	37, 977
Mon 13 th March	Lab 8: Respiratory system	
Tues 14 th March	Midterm 2	
Thurs 16 th March	Selected Organ System: Circulatory system	38, 1001
Mon 20 th March	Lab 9: Comparative physiology of organ systems; Circulatory	
Tues 21 st March	Selected Organ System: Digestive System	36, 954
Thurs 23 rd March	Selected Organ System: Excretion	39, 1028
Mon 27 th March	Lab 10: Comparative physiology of organ systems Digestion and Excretion	
Tues 28 th March	Selected Organ System: Nervous system Part 1	42, 1159
Thurs 30 th March	Selected Organ System: Nervous system Part 2	42, 1159
Mon 3 rd April	Lab 11: Comparative physiology of organ systems Nervous system	
Tues 4 th April	Population Ecology	26, 690
Thursday 6 th April	Community Ecology	27, 717
Mon 10 th April	Easter Monday No class	
Tues 11 th April	Ecosystems	26, 690
Thurs 13 th April	Review	
Finals: Tuesday 18 th April 2023		

Requirements:

Assessment and Evaluation:

Midterm 1 –20%, 7th February

Midterm 2 –20%, 14th March

Quizzes – 10%

Final – 30%, 18th April

2 lab-related assignment, 5% each (Evolution and Natural Selection Lab assignment, in-person submission due 23rd January, microscope use due 30th Jan)

Oral presentation, 10% (Group work) (In class 27th February)

Attendance:

Although attendance will not be taken in lectures, *students, who are absent from lecture(s) are responsible for the course materials covered*

- Doctor's notes are required for deferred assignments and exams
- **Lab attendance is a must!**

Grade Summary:

The available letters for course grades are as follows:

Percent (%) to Letter Grade Conversion	Grade	Grade Point	Description
95.00% - 100%	A+	4.0	Excellent
87.00% - 94.99%	A	4.0	
80.00% - 86.99%	A-	3.7	
77.00% - 79.99%	B+	3.3	Good
73.00% - 76.99%	B	3.0	
70.00% - 72.99%	B-	2.7	
67.00% - 69.99%	C+	2.3	Satisfactory
63.00% - 66.99%	C	2.0	
60.00% - 62.99%	C-	1.7	
55.00% - 59.99%	D+	1.3	Minimal Pass
50.00% - 54.99%	D	1.0	
00.00% - 49.99%	F	0	
			Fail

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Other:

Classroom Etiquette:

1. Electronic Devices

Although computers and tablets can be used in the class for taking lecture notes. Please turn off the ring tone of your cellular phone - it is very distracting to hear someone's phone go off in class. Texting and movie watching are prohibited in class.

2. Attend every class

You will find that students who attend every class, listen to the instructor and take good notes will be more likely to pass (with a higher grade). If you have an emergency or illness, please contact me ahead of time to let me know that you will be absent.

Important note: if you miss a class, it is your responsibility to make up the missed work.

3. Get to Class on Time

Students, who walk into the classroom late or leave early, distract other students and disrupt the learning environment.

4. Do Not Have Private Conversations in During Lecture

The noise is distracting to other students, and disrespectful to the instructor. Also, talking to classmates during lecture and presentations disrupts the normal learning environment.

5. Do Not Get Up and Walk Out Halfway Through the Class

It disturbs people and gives the unmistakable impression that you don't respect the class, the other students or the instructor. The instructor has the right to finish his or her thought at the end of the class period and conclude the class in an orderly fashion without people standing up and walking out

6. Your Classmates Deserve Your Respect and Support

Others may have different ideas and opinions from yours, they may ask questions you perceive to be "stupid," but they deserve the same level of respect from you as you wish from them.

Academic Misconducts:

Please refer to Ambrose Undergraduate Academic Calendar <https://ambrose.edu/undergrad-academic-calendar/academic-information/academic-misconduct>

Plagiarism:

Plagiarism is a very serious academic offence that involves presenting work in a course as if it were the result of one's own study and investigation when, in fact, it is the work of someone else. Plagiarism takes place when:

- an essay or other work is copied from another source, including your peer's work, and submitted as one's own
- parts of a work, including words, ideas, images or data, are taken from a source without acknowledgement of the originator

- work presented for one course is also submitted for another course without prior agreement of the instructors involved
- another person prepares the work that is submitted as one's own
- substantial editorial or compositional assistance from another person is received on work that is submitted as one's own

Cheating:

Cheating is also a very serious academic offence. Cheating on examinations, assignments and/or labs may take a number of forms, including:

- tampering or attempting to tamper with examination scripts, class work, grades or class records
- obtaining unauthorized assistance from anyone during the course of an examination
- impersonating another student during examinations
- falsifying or fabricating lab reports
- communicating with other students during an examination
- bringing unauthorized written material or electronic devices to an examination
- possessing, distributing, or attempting to possess or distribute unauthorized material in respect to examinations
- attempting to read the examination papers of other students
- deliberately exposing one's own examination papers to another student

Ambrose University Important Information:

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.

Exam Scheduling

Students who find a conflict in their exam schedule must submit a *Revised Final Exam Time Application* to the Office of the Registrar by the deadline noted in the Academic Calendar. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; or 2) the scheduled final examination slot results in three consecutive examination periods. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Standards of Behaviour in the Classroom Setting

Learning is an active and interactive process, a joint venture between student and instructor and between student and student. Some topics covered within a class may lead to strong reactions and opinions. It is important that Students understand that they are entitled to hold contradictory beliefs and that they should be encouraged to engage with these topics in a critical manner. Committing to this type of "active learning" significantly increases the learning experience for both teacher and student, and reflects the Christian imperative to pursue truth, which lies at the heart of the Ambrose educational experience. However, active discussion of controversial topics will be undertaken with respect and empathy,

which are the foundations of civil discourse in the Classroom Setting. Primary responsibility for managing the classroom rests with the instructor. The instructor may direct a student to leave the class if the student engages in any behaviour that disrupts the classroom setting. If necessary, Ambrose security will be contacted to escort the student from class. Please refer to your professor regarding their electronic etiquette expectations.

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. 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.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. The

academic calendar can be found at <https://ambrose.edu/academics/academic-calendar>

Privacy

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.

Coursework Extensions

Should a request for a time extension on coursework exceed the end of the term, a *Coursework Extension Application* must be completed and submitted to the Office of the Registrar. The extension (if granted) will be recorded on the student record. Extensions are granted at the discretion of the instructor and registrar. Normally, Course Extension Applications will be considered only when all of the following conditions are met:

- the quality of prior course work has been satisfactory;
- circumstances beyond your control, such as an extended illness or death of a family member, make it impossible for you to complete the course work on time; and
- you submit *Coursework Extension Application* to the Office of the Registrar on or before the deadline specified in the Academic Schedule.

If granted, time extensions do not excuse you from a final examination where one has been scheduled for the course. A temporary grade of TX will be assigned until a final grade is submitted in accordance with the new deadline. A final grade of F will apply to:

- all course work submitted after the end of the semester unless a coursework extension has been granted; and all course work submitted after the revised due date provided by an approved extension to coursework.

Academic Success and Supports

Accessibility Services

Academic accommodation is provided to Ambrose students with disabilities in accordance with the Alberta Human Rights Act and the Canadian Charter of Rights and Freedoms. Provision of academic accommodation does not lower the academic standards of the university nor remove the need for evaluation and the need to meet essential learning outcomes. Reasonable accommodations are tailored to the individual student, are flexible, and are determined by considering the barriers within the unique environment of a postsecondary institution. It can take time to organize academic accommodations and funding for disability-related services. Students with a disability who wish to have an academic accommodation are encouraged to contact Accessibility Services as early as possible to ensure appropriate planning for any needs that may include accommodations. Staff can then meet with students to determine areas to facilitate success, and if accommodations are required, ensure those accommodations are put in place by working with faculty.

Ambrose Writing Services

Ambrose Writing services provides academic support in the four foundational literacy skills—listening, speaking, reading, and writing. It also assists students with critical thinking and the research process. Throughout the academic year, students can meet with a writing tutor for personalized support, or they can attend a variety of workshops offered by Academic Success. These services are free to students enrolled at Ambrose University. Academic Success serves all students in all disciplines and at all levels, from history to biology and from theatre to theology. To learn more, please visit <https://ambrose.edu/sas/writing-services>

Ambrose Tutoring Services

Ambrose Tutoring Services provides support in specific disciplinary knowledge, especially in high-demand areas such as chemistry, philosophy, math and statistics, and religious studies. These tutors also coach students in general study skills, including listening and note-taking. During the academic year, Ambrose Tutoring Services offers drop-in tutoring for courses with high demand; for other courses, students can book a one-to-one appointment with a tutor in their discipline. These services are free to students enrolled at Ambrose University. To learn more, please visit <https://ambrose.edu/tutoring>.

Mental Health Support

All of us need a support system. We encourage students to build mental health supports and to reach out when help is needed.

On Campus:

- Counselling Services: ambrose.edu/counselling
- For immediate crisis support, there are staff on campus who are trained in Suicide Intervention Skills and can help you access mental health support. See <https://ambrose.edu/student-life/crisissupport> for a list of staff members.
- For additional wellness resources go to the Ambrose wellness page: <https://ambrose.edu/wellness>

Off Campus:

- Distress Centre - 403-266-4357
- Alberta Mental Health Helpline - 1-877-303-2642 (Toll free)
- Sheldon Chumir Health Care Centre - 403-955-6200
- Emergency - 911

Sexual Violence Support

We are committed to supporting students who have experienced gender based sexual violence in the past or while at Ambrose. Many of the staff, faculty, and student leaders have received Sexual Violence Response to Disclosure training. We will support you and help you find the resources you need and you can access

information about reporting. Information about the Sexual Violence policy and on and off campus supports can be found on our website– ambrose.edu/sexual-violence-response-and-awareness.

Off Campus:

- Alberta's Oneline for Sexual Violence - 1-866-403-8000 call or text
- Clinic: Sheldon Chumir Health Centre - 403-955-6200
- Calgary Communities Against Sexual Abuse - 403-237-5888
- Chat: www.calgarycasa.com

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