

Course ID:	Course Title:	Winter 2024
BIO 133	Introduction to Plant and Organismal Biology	Prerequisite:
		Credits: 3

Class Information		Instructor Information		Important Dates	
Delivery:	In Class	Instructor:	Dr. Damilola Adingupu	First Day of Class:	8 th Jan 2024
Days:	Tues, Thur	Email:	Ambrose email	Last Day to Add/Drop:	Jan. 21
Time:	8:15 – 9:30am	Phone:		Last Day to Withdraw:	March 28
Room:	A2233	Office:	A2160	Last Day to Apply for Coursework Extension:	April 2
Lab/Tutorial:	Mon 11:30-2:30pm & Tue 1-4pm (lab) A2151	Office Hours:	By Appointment on Mon, Tue, Thurs	Last Day of Class:	April 12
Final Exam:	Tues 16 th April 9-12 pm A2133				

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.

Required Digital Learning Resources:

- Sign up for **TopHat**. This is an in-class response system, you used this last semester and if you purchased for a year, your access will still be valid.
 - There will be in-lecture quizzes administered through TopHat that is worth 10% of your overall grade.

Course Schedule

Date	Lecture/ lab Schedule	Textbook Chapter
Tue 9 th Jan	Intro to Evolution Part 1	16, 407 - 426
Thurs 11 th Jan	Evolution and Taxonomy Part 2	19, 471 - 495
Mon 15 th Jan & Tues 16 th Jan	Lab 1: Evolution and Natural Selection	
Tues 16 th Jan	Taxonomy and Phylogeny Part 3	19, 471 - 495
Thurs 18 th Jan	Diversity of life: Fungi Part 1	22, 547 - 565
Mon 22 nd Jan & Tues 23 rd Jan	Lab 2: Microscope use and Scientific Drawing	
Tues 23 rd Jan	Diversity of life: Fungi Part 2	22, 547 - 565
Thurs 25 th Jan	Undergrad Program Day No Class	
Mon 29 th Jan & Tues 30 th Jan	Lab 3: Fungi	
Tues 30 th Jan	Diversity of life: Plants Part 1	23, 571 - 597
Thurs 1 st Feb	Diversity of life: Plants part 2	23, 571 - 597
Mon 5 th Feb & Tues 6 th Feb	Lab 4: Plant Diversity and choosing a topic for presentation	
Tues 6 th Feb	Midterm 1	
Thurs 8 th Feb	Diversity of life Plants part 3	24, 571 - 597
Monday 12 th Feb & Tues 13 th Feb	Lab 5: Seminar Diversity of Life	
Tues 13 th Feb	Animal Diversity 1 – Introduction	24, 603 - 618
Thurs 15 th Feb	Animal Diversity 2 - Protostomes	24, 619 - 637
Mon 19 th Feb	Family Day No class	
Tuesday 20 th Feb	Reading week, No Class	
Thurs 22 nd Feb	Reading week, No Class	
Mon 26 th Feb & Tues 27 th Feb	Lab 6: Group Presentation	
Tues 27 th Feb	Animal Diversity 3	24, 619 - 637
Thurs 29 th Feb	Animal Diversity 4	24, 619 - 637
Mon 4 th & Tues 5 th March	Lab 7: Biodiversity Hike	
Tues 5 th March	Animal Diversity 5- Deuterostomes	24, 638 - 665
Thurs 7 th March	Animal Diversity 6	24, 638 - 665
Mon 11 th & Tues 12 th March	Lab 8: Seminar Introduction to Body Organization and organ systems	
Tues 12 th March	Midterm 2	
Thurs 14 th March	Animal Diversity 7	24, 638 - 665
Mon 18 th & Tues 19 th March	E Learning Lab 9: Comparative physiology of organ systems; Circulatory	
Tues 19 th March	Animal Diversity 8 (Recorded Class)	24, 638 - 665
Thurs 21 st March	Introduction to Animal Organization and Physiology Part 1 (Recorded Class)	35, 925 – 941

Mon 25 th & Tues 26 th March	Seminar and Review activity	
Tues 26 th March	Introduction to Animal Organization and Physiology Part 2 (Recorded Class)	35, 925 – 941
Thurs 28 th March	Population, Community and Ecosystem Ecology Part 1 (Recorded Class)	26, 689 - 711
Mon 1 st April	Easter Monday No Class	
Tues 2 nd April	Population, Community and Ecosystem Ecology Part 2	26, 689 - 711
Thurs 4 th April	Population, Community and Ecosystem Ecology Part 3	27, 717 - 746
Mon 8 th & Tue 9 th April	Lab 10: Introduction to Animal Organization: Identifying Animal Tissues	
Tue 9 th April	Population, Community and Ecosystem Ecology Part 4	28, 753 - 773
Thurs 11 th April	Review	

Requirements:

Assessment and Evaluation:

- Midterm 1 – 20%, Mon 6th Feb
- Midterm 2 – 20%, Tues 12th March
- Final Exam – 30%, Tues 16th April 9-12 pm A2133
- 2 lab-related assignment at 5% each: First assignment online/ in-person submission due for **Evolution and Natural Selection lab report** on Tuesday 30th Jan at 1159pm, Second assignment online/ in-person submission due for **Plant Diversity lab report** on Tuesday 27th Feb at 1159pm, - Total 10%
- Oral presentation (26th and 27th Feb) – 10%
- TopHat Quizzes and participation in discussion - 10%

- Students are encouraged to read the corresponding chapter prior to attending lectures
- Students are encouraged to generate their own notes according to their learning styles
- Lecture materials, except fill-in slides, and assignments will be posted on Moodle
- Final exam is *comprehensive* (i.e. cumulative)

Attendance:

Attendance at all lectures is strongly recommended, this will help ensure success on lab assignments, quizzes, and exams. Failure to attend classes will mean loss of up to 10% of overall grade, given the in-class quizzes and attendance score that will be allocated. Attendance is mandatory at all labs and tutorials. Lab assignments will not be accepted unless the lab has been attended or exceptions have been made with the instructor. An absence for an exam or quiz requires that a note be provided from a medical authority before the student may complete the test. If absences for an extended period occur the instructor should be notified.

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 Policies & Procedures:

Registration

Registration is the process of selecting and enrolling in classes for upcoming semesters. Only students who are registered will be permitted to attend class and receive a grade for the course. You are responsible for ensuring that the courses you take are appropriate for your program, that they do not have any scheduling conflicts, that they have the necessary prerequisites and that they meet all degree requirements.

Withdrawal From A Course

Prior to the Add/Drop deadline: through the student registration system whereby course(s) will be removed with no academic or financial penalty. After the Add/Drop deadline and until the Withdrawal deadline: through submission of the 'Withdrawal from Course' form whereby course(s) will remain on the permanent academic record/transcript with the symbol 'W'. (See ambrose.edu/registrar/request-forms.) Students who withdraw from more than 30 credits attempted at Ambrose University will be required to withdraw from their program. Students considering withdrawing from courses are encouraged to discuss with their Faculty Advisor and/or the Office of the Registrar questions relating to their withdrawal decision specifically relating to financial assistance, study permit requirements, prerequisites for subsequent courses, readmission, and/or graduation timeline. Students who do not formally withdraw from a course are still considered registered in the course, even if they are no longer attending classes. In this case, students will be assigned a grade based on coursework completed as per the course syllabus and are responsible to pay the tuition and fees assessed for the course. Under extenuating circumstances, students may request from the Office of the Registrar a course(s) withdrawal after the Withdrawal deadline and until the last day of classes. Extenuating circumstances typically consider situations such as medical emergencies, compassionate grounds, or unforeseen conditions/situations beyond the students' control that arise after the start of the semester and are considered on a case-by-case basis. Supporting documentation from a physician or Registered Health Professional must accompany this request.

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. If granted, time extensions do not excuse you from a final examination where one has been scheduled for the course. More conditions apply.

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.

Communication

Your Ambrose email account is the University's primary and official mode of communication with you. Information delivered to your Ambrose email is considered official notification. Ambrose University is not responsible for your failure to receive important information delivered to your Ambrose email.

Lecture Recording

The recording of lectures or any other classroom academic activity, other than an audio recording as an accommodation, is prohibited except at the discretion of the instructor. Any use other than that agreed upon with the instructor constitutes academic misconduct and may result in suspension or expulsion. Permission to allow a lecture recording is not a transfer of any copyrights, so such recordings may be used only for individual or group study with other students enrolled in the same class and may not be reproduced, transferred, distributed or displayed in any public or commercial manner. Student must destroy recordings in any, and all formats at the end of the semester in which they are enrolled in the class. All students recording lectures, must sign the Permission Form to audio record lectures which is available through the Office of the Registrar.

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.

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.

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.