

Course ID:	Course Title:	Fall 2022	
Med 261	Human Anatomy and Physiology I	Prerequisite: BIO 131	
		Credits: 3	

Class Information		Instructor Information		Important Dates	
Delivery:	In Class	Instructor:	Dr. Damilola Adingupu	First Day of Class:	Sept 7 2022
Days:	Wed & Fri	Email:	Dami.Adingupu@ambrose.edu	Last Day to Add/Drop:	Sept 18 2022
Time:	1:00 – 2:15PM	Phone:		Last Day to Withdraw:	Nov 21 2022
Room:	A2212 & A2145	Office:	L2086	Last Day to Apply for Coursework Extension:	Nov 23 2022
Lab/Tutorial:	3hrs/wk & Mon 3:15- 6:15PM	Office Hours:	By appointment	Last Day of Class:	Dec 12 2022
Final Exam:	A2212 Wed 14 th Dec 1-4 PM				

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

A systems approach to human anatomy and physiology. Basic biochemistry and cell biology as well as integumentary, skeletal muscular, nervous, and endocrine systems will be covered. Structure and function will be emphasized in both lecture and laboratory components. This course consists of 2.5 hours of lectures per week, plus a 3-hour lab.

Expected Learning Outcomes

- 1. Understand the structure and function of the following human body systems: integumentary, skeletal, muscular, nervous, and endocrine.
- 2. Describe the basic biochemical and cellular mechanisms underlying physiological processes.
- 3. Apply critical thinking to problem-solve issues related to health maintenance and disturbances in homeostasis.
- 4. Perform basic physiological experiments and anatomical dissections

- 5. Develop a curiosity and wonder of the complexity and beauty of the human body and the enthusiasm to continue learning and questioning.
- 6. A strengthened research skill, as well as the ability to communicate scientific information effectively using oral presentations and written reports

Required Textbook

Human Anatomy & Physiology (11th edition) by Elaine N. Marieb & Katja Hoehn, published by Pearson.

Required Digital Learning Resources:

• Sign up for Poll Everywhere. This is an in-class response system, and subscription is free

- free subscription at <u>https://www.polleverywhere.com/</u>
- <u>https://www.polleverywhere.com/guides/student</u>
- Poll Everywhere apps are available for iPhone and Android
- Piazza discussion forum (free subscription):
 - free subscription at <u>https://www.piazza.com</u>
 - class link: piazza.com/ambrose/fall2022/med261
 - Piazza mobile apps are available for iPhone and Android

Date	Lecture/ lab Schedule	Textbook Chapter, page
Sept 7	Introduction to Anatomy and physiology	1 , 2 - 20
Sept 9	Basic Biochemistry	2, 38 - 56
Sept 12	Lab 1: Introduction to Lab/ techniques, anatomical position	
Sept 14	Basic Cell Biology Part 1	3 , 61 - 79
<mark>Sept 16</mark>	Basic Cell Biology Part 2	3 , 79 - 96
<mark>Sept 19</mark>	Lab 2: The cell and transportation across cell membrane	
<mark>Sept 21</mark>	Tissue	4 , 116 - 144
<mark>Sept 23</mark>	The Integumentary System	5 , 150 - 169
Sept 26	Lab 3: Classification of tissue and Integumentary System	
Sept 28	Bones and Skeletal tissue	6 , 174 - 190
Sept 30	Non-teaching day: National Day for Truth and Reconciliation	
Oct 3	Lab 4: Anatomy Lab, Overview of the Skeleton	
Oct 5	No class: Deeper Life	
Oct 7	Midterm 1	
Oct 10	Thanksgiving (no classes)	
Oct 12	The skeleton: Axial Skeleton	7 , 199 - 227
Oct 14	The skeleton: Appendicular Skeleton	7 , 227 - 245
Oct 17	Lab 5: Axial and Appendicular skeleton	
Oct 19	Joints	8 , 251 - 272
Oct 21	Muscle and Muscle Tissue	9 , 280-283, 290-316
Oct 24	Lab 6: Microscopic Anatomy and Organization of	
	Skeletal Muscle	
Oct 26	The Muscular system	10 , 324-329
Oct 28	The Muscular system: Main Muscles	10 , 332-
Oct 31	Lab 7: Skeletal Muscle Physiology	
Nov 2	Fundamentals of the nervous system	11 , 391-427
Nov 4	Membrane and Action potential	11 , 391-427
Nov 7	Reading Week, no classes	
Nov 9	Reading Week, no classes	
Nov 11	Reading Week, no classes	
Nov 14	Midterm 2	
Nov 16	Central Nervous system: The Brain	12 , 435-469
Nov 18	Central Nervous system: The Spinal Cord	12 , 470-481
Nov 21	Oral presentation	
Nov 23	Peripheral Nervous system	13 , 490-525
Nov 25	Autonomic nervous system	14 , 532-548
Nov 28	Lab 8: The Autonomic Nervous System	
Nov 30	Special Senses: Vision, Smell, Taste	15 , 554-580
Dec 2	Special Senses: Hearing and Balance	15 , 580-596
Dec 5	Lab 9: General senses and Special senses	
Dec 7	Endocrine System	16 , 602-617
Dec 9	Endocrine System	16 , 617-635
Dec 12	Lab 10: Endocrine system and stress response	

Note: Lab activity for September 19th will be uploaded on Moodle and Lectures for September 16th, 21st and 23rd will be pre-recorded and uploaded on Moodle. You are expected to watch these lectures and do the learning review activity.

Assessment and Evaluation:

Midterm 1 –25%, October 7 Midterm 2 –25%, November 14 Final – Wed 14th Dec 1-4 PM, 30% 1 lab-related assignment, 10% (Online submission due 24th October) Oral presentation (Group work), 10% (In class 21st November)

- 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. 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 of time 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	
87.00% - 94.99%	A	4.0	Excellent
80.00% - 86.99%	A-	3.7	
77.00% - 79.99%	B+	3.3	
73.00% - 76.99%	В	3.0	Good
70.00% - 72.99%	В-	2.7	
67.00% - 69.99%	C+	2.3	
63.00% - 66.99%	C	2.0	Satisfactory
60.00% - 62.99%	C-	1.7	
55.00% - 59.99%	D+	1.3	
50.00% - 54.99%	D	1.0	Minimal Pass
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.

Late Work

In general, late work is accepted but penalized by a loss of 0.5% per day. If you have a spectacularly good excuse for being late, let me know as soon as possible and I'll consider waiving the penalty.

Academic Integrity – Cheating and Plagiarism

For exams, working with other students is NOT allowed. For all other assignments, working together IS allowed (unless stated otherwise). If you use any sources other than your instructor, classmate, textbook, or lab handout, please cite them

It is your responsibility to ensure that all work you submit is original and that credit is given to ideas that are not your own. See below for Ambrose's statement defining plagiarism and outlining its consequences. While you will be working with at least one partner during labs, it is expected that you each hand in your own, individual assignment that is your own original work.

Examples of plagiarism include, but are not limited, to:

1. Copying an assignment from someone else and submitting it as your own work.

2. Working with a friend and writing down identical answers, whether you understand the content or not, and submitting the assignments separately.

3. Quoting directly from a source without supplying quotation marks or a citation.

4. Quoting directly from a source without supplying quotation marks, even if it is referenced.

5. Submitting an assignment in which >30% of the content is properly quoted; that is, at least 70% of the words in an assignment need to be your own. A general rule of thumb: for every line quoted, there should be three lines of your own material explaining that quote.

6. Submitting the same or similar assignment for more than one class, or more than one iteration of the same class.

Penalties for plagiarism

For a first offense in any one of my classes, a zero on the assignment with no chance of rewriting it, and a note in your academic file.

For a second offense in any one of my classes, a zero in the class, and recommendation for a note on your transcript.

For a third offense in any one of my classes, a zero in the class and a recommendation for expulsion from the university.

Note that Ambrose has appeals process in place if you feel that allegations of plagiarism are unfounded; these are for final marks only, and not for individual assignments.

Note that my record of a student's past plagiarism does not reset with each semester.

HOW TO POSITION YOURSELF FOR ACADEMIC SUCCESS

1. Come to lecture, labs and tutorials – People learn in many ways, some are auditory learners, some visual learners, some tactile, but most of us use a combination of all of these. I will try use a combination of these in class, therefore attending increases your opportunities for learning.

2. Note Taking – Reading over your notes within 24 hours after class and supplementing with more detail from the text will greatly enhance your retention of the material. I would suggest taking lecture notes in one color and using contrasting color for 'added' material.

3. Keep up with the reading material – Lectures will not always cover all the material so your text is an important resource. Focus on the summary charts, bold or highlighted items, and end of chapter reviews. Supplement your lecture notes with points from your readings. The text provides a wealth of visual illustrations and additional web based resources. Utilize all of these resources to help you learn. There is sometimes a tendency to go into a studying slump after mid-semester.

Just like in a race, do not let up until the finish line!

4. Do your laboratory report –You can expect to see question like your lab report to appear on quizzes and exams.

5. Form study groups – Study groups can help you learn while making new friends. Often students can learn as much from their peers as from the professor. When you can explain a concept to someone else then you know that you really know it.

6. Ask for help – Students ARE NOT an interruption from my work, but the reason for it! Visit me during office hours, send an email or make an appointment. Sometimes that extra bit of explanation makes all the difference.

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

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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
- Peer Supportive Listening: One-to-one support in Student Life office. Hours posted at ambrose.edu/wellness.
- For immediate crisis support, there are staff on campus who are trained in Suicide Intervention and Mental Health First Aid. See https://ambrose.edu/student-life/crisissupport for a list of staff members.

Off Campus:

- Distress Centre 403-266-4357
- Sheldon Chumir Health Care Centre 403-955-6200
- Emergency 911

Sexual Violence Support

All staff, faculty, and Residence student leaders have received *Sexual Violence Response to Disclosure* training. We will support you and help you find the resources you need. There is a website with on and off campus supports – ambrose.edu/sexual-violence-response-and-awareness.

Off Campus:

- Clinic: Sheldon Chumir Health Centre 403-955-6200
- Calgary Communities Against Sexual Abuse 403-237-5888

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