

| Course ID: | Course Title: | Autumn 2021 |
|------------|------------------------|-----------------------------------|
| KIN 255 | Growth and Development | Prerequisite: BIO 131 and BIO 133 |
| | | Credits: 3 |

| Class Information | | Instructor Information | | Important Dates | |
|---------------------------|--|------------------------|--|--|--------------------|
| Days: | Wednesday/Friday In Class | Instructor: | Dr. Harry E. Peery, AAS, BS, MS, ABD, PhD, RN (Arizona, New York) | First day of classes: | September 8, 2021 |
| Time: | 10-11:15 AM | Email: | harry.peery@ambrose.edu | Last day to add/drop, or change to audit: | September 19, 2021 |
| Room: | L2100 | Phone: | By e-mail at harry.peery@ambrose.edu | Last day to request revised exam: | n/a |
| Lab/ Tutorial: | None | Office: | L2091 | Last day to withdraw from course: | November 22, 2021 |
| | | Office Hours: | 11:15-12 noon W/F. Open door policy, or by appointment; email any time | Last day to apply for coursework extension: | November 23, 2021 |
| Final Exam: | Yes, in-class Final Exam Schedule Wed Dec. 15, 9-12 L2100 (this class room) | | | Last day of classes: | December 13, 2021 |

Course Description

This course will teach the physiological and anatomical changes in the human body through embryonic and fetal development and childhood, as well as discussing the changes seen with aging. It will teach the effects of aging on body physiology and discuss possible physical therapies to counter these effects.

Expected Learning Outcomes

1. List the biological aspects in the stages and patterns of human growth and development.
2. Name the phases of structural tissues and their role in physiological function in growth and development.
3. Understand inter-individual differences in growth, development and maturation.
4. Discuss the regulatory factors influencing growth, development and maturation.

5. Explain the role of physical activity in growth, development and aging.
6. Describe some of the theories related to cellular aging.
7. Understand the physiological changes with aging and the effects on physical activity and capacity.

Textbook

Larsen's Human Embryology, 6th ed., by Gary C. Schoenwolf, Steven B. Bleyl, Philip R. Brauer, and Philippa H. Francis-West. Elsevier, 2021.

Course Schedule

This is a tentative schedule and may be subject to change.

| Date | Lecture | Topic | Chapter |
|-----------------------|---------|--|---------|
| Sep 8 | 1 | Introduction to the Course; Development of the Reproductive system | 16 |
| Sep 10 | 2 | Gametogenesis: Spermatogenesis, meiosis | 1 |
| Sep15 | 3 | Gametogenesis: oogenesis and ovulation | 1 |
| Sep17 | 4 | Fertilization and cleavage | 1 |
| Sep22 | 5 | Implantation and formation of fetal membranes | 2 |
| Sep24 | | Review | |
| Sep 29 | | Developmental changes during childhood (Harry Peery) | |
| Oct 1 in-class | | Midterm 1 (Covers Lectures 1-to where we end on Sept 22) | |
| Oct 6 | 6 | Body plan; development of the nervous system | 4 |
| Oct 8 | 7 | Development of the placenta; fetal disorders and treatment | 6 |
| Oct 13 | 8 | Development of the skin and musculoskeletal system | 7,8 |
| Oct 15 | 9 | Development of the central nervous system I | 9 |
| Oct 20 | 10 | Development of the central nervous system II | 9 |
| Oct 22 | 11 | Development of the peripheral nervous system | 10 |
| Oct 27 | | Developmental changes during adult years (Harry Peery) | |
| Oct 29 | 12 | Development of the respiratory system and body cavities | 11 |
| Nov 3 | 13 | Development of the Heart | 12 |
| Nov 5 | | Review | |
| Nov 8-13 Reading Week | | Reading Week – No Classes | |
| Nov 17 in-class | | Midterm 2 (Covers Lectures 6-11) | |
| Nov 19 | 14 | Development of the heart; Congenital heart defects | 12 |
| Nov 24 | | Developmental changes during old age (Harry Peery) | |
| Nov 26 | 15 | Development of the vasculature | 13 |
| Dec 1 | 16 | Development of the GI tract | 14 |
| Dec 3 | | Presentations | |
| Dec 8 | | Presentations | |
| Dec 10 | | Review | |
| Dec 15 in-class Final | | Final Exam (not cumulative) (Covers Lectures 12-16) 9-12 AM | |

Requirements:

3 Exams (50 questions over 70 minutes) open book

3@20 points = 60%

Participation and attendance

1@10 points = 10%

PowerPoint Presentation in class presentation

1@30 points = 30%

100 points = 100%

Attendance:

Attendance at lectures is **STRONGLY** recommended and will help ensure success on course exams and assignments.

Exams is open book and questions are taken from the objectives for each lecture. The exams are multiple choice (choices a-d) and will be in print form to be taken in class. There are 50 questions to be taken within 75 minutes.

PowerPoint Presentations

One PowerPoint Presentation per student on a developmental subject of your own choosing.

Specifications: No more than 30 PowerPoint slides in a presentation.

No less than 18 PowerPoint slides in a presentation

Font: 18 point except for headings – do not use script type.

No more than 8 lines of text per slide

Lots of illustrations

References: At least 3 references (can be from the web)

Keep same 18-point type

Can use more than one slide for references.

Format: Sections of the Presentation

Title – **include your name and date here**

Introduction

Subject

Evidence

Conclusions

References

• PowerPoint Suggestions

- Do not load each slide with lots of print.
- Use images wherever possible
- Present your approach to a problem that you would eventually like to work on.
- Always state your hypothesis at the beginning
- You should limit the slides to 30 or less
- You will present your presentation live.
- Post them to Moodle as well as present them.

Rubric for PowerPoint Presentation

This criterion is linked to a Learning Outcome: Addresses Assignment Content for PowerPoint Presentation

| | | |
|--------------------------|---|--|
| 10 pts Full Marks | 5 pts Covers most areas as specified in assignment | 0 pts Does not cover content requirements |
|--------------------------|---|--|

This criterion is linked to a Learning Outcome: Assigned PowerPoint Presentation Posting

| | |
|---|---|
| 10 pts Full Marks presented and posted on time | 0 pts Power Point presentation not done or posted late |
|---|---|

This criterion is linked to a Learning Outcome: Organization, Grammar and Spelling

| | | |
|--------------------------|---|---|
| 10 pts Full Marks | 5 pts A few grammatical, spelling or punctuation errors, flow of information occasionally disjointed | 0 pts Poorly organized, multiple errors in spelling and or grammar |
|--------------------------|---|---|

30 pts = 30%

| Criteria | Ratings | | |
|--|--------------------------------------|---|--|
| This criterion is linked to a Learning Outcome: Listening | 3 pts Attentive Whole time | 1.5 pts Eating or Drinking While Listening | 0 pts Playing games While Listening |
| This criterion is linked to a Learning Outcome: Frequency of Participation | 3 pts Frequently participated | 1.5 pts Occasionally Participated | 0 pts Did not Participate |
| This criterion is linked to a Learning Outcome: Attendance | 4 pts Present | 2 pts Late Joining | 0 pts Absent |
| Total 10 pts = 10% | | | |

Grade Summary:

| Grade | Percent | Grade Point Value | Description |
|-------|---------|-------------------|---|
| A+ | 96-100 | 4.00 | Outstanding |
| A | 92-96 | 4.00 | Excellent - superior performance, showing comprehensive understanding of subject matter. |
| A- | 88-92 | 3.70 | |
| B+ | 83-88 | 3.30 | |
| B | 78-83 | 3.00 | Good-clearly above average performance with knowledge of subject matter generally complete. |
| B- | 73-78 | 2.70 | |
| C+ | 68-73 | 2.30 | |
| C | 64-68 | 2.00 | Satisfactory – basic understanding of the subject matter. Grade point average below 2.00 is not sufficient for promotion. |
| C- | 60-64 | 1.70 | Minimum grade required if needed as a prerequisite course |
| D+ | 55-60 | 1.30 | |
| D | 51-55 | 1.00 | Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject. |
| F | <50 | 0.00 | Fail – unsatisfactory performance or failure to meet course requirements. |
| P | Pass | | No Grade Points |

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

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.

Other:

Classroom Etiquette:

It is expected that students will take an active role in the learning process. This includes: (a) regular class attendance, (b) reading course material in advance of class, and (c) engaging in discussions during class.

In respect to the professor and to your fellow students, we ask that you:

- Turn your phone off during class and that you don't use it for texting during lecture
- Do not have conversations with the people beside you during lecture – it is very distracting to the people around you
- Use your laptops for lecture material and assignments only – that you are not using the internet or Facebook during class time.
- Arrive to lecture **on time**

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,

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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

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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.

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 ambrose.edu/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.

Disability Accommodations:

Ambrose University is committed to ensuring access to classes, course material, and learning opportunities for everyone. If you have a letter from the Disability Office for Students indicating you have a disability that requires academic accommodations, please present the letter to me and discuss the accommodations you may need for this class. If you have not yet established services through Ambrose, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are encouraged to contact the office of disabilities. Accommodation are established through an interactive process between you, your instructor(s) and the office of Disabilities.

Integrity and Academic Conduct:

Ambrose University is committed to the highest academic standards. As a member in this course, you agree to uphold the fundamental standards of honesty, respect, and integrity, and accept the responsibility to require others to adhere to these standards. Everyone is expected to behave in a mature manner and be responsible for their actions. The student conduct code of Ambrose University requires members to practice "high standards of academic and professional honesty and integrity."

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Any of the following is a violation of engineering ethics and can result in probation, suspension, or dismissal from the University:

- Cheating on examinations
- Cheating (i.e. plagiarism) on individual projects
- Theft or alteration of other people's work on academic materials for the purpose of improving one's own grades or acquiring academic credit

What is plagiarism and how do I avoid it?

"Plagiarism is utilizing someone else's work from any source, i.e., someone's ideas, writings, or inventions, and using it WITHOUT ACKNOWLEDGMENT. As long as you give credit to the originator of the material, you are not guilty of plagiarism. Merely enclosing statements or sentences in quotation marks is not sufficient; you must cite the source." (COE Misconduct Policy) Copying sentences, paragraphs, etc. directly from sources, even while citing the source, is also plagiarism (i.e. If your writing seems too much like their writing! – word choice, phrases, structure). If you have any questions about what constitutes plagiarism, please ask me!

Plagiarism Policy:

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 a note in your academic file.

Note that Ambrose has an 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 the instructor's record of a student's past plagiarism does not reset with each semester.