
Course Information

Instructor Name:	Leigh Gabel	Classroom #:	ICT 102
Email Address:	leigh.gabel@ucalgary.ca	Day(s) Class Meets:	MWF
Office #:	KNB 426	Time Class Meets:	13:00-13:50
Office Hours:	Monday 14:00-15:00	Course Website:	D2L

Teaching Assistant(s): Ashifa Hudani ashifa.hudani@ucalgary.ca
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Course Description:

The physiological, anatomical, emotional and social changes in human growth and development, with a view to the planning and selection of appropriate programs in physical education, sport, and dance. Human growth and development is a core course within the Faculty of Kinesiology.

Prerequisites:

Kinesiology 260

Corequisite:

Kinesiology 323

Course Objectives:

By the end of this course, students will:

1. Identify and contrast the concepts of somatic growth, maturation, and development.
2. Describe and compare study designs and techniques used to assess somatic growth, development, and biological maturation.
3. Discuss the various stages of human growth and maturation and how various systems of the body interact; primarily through the first two decades of life.
4. Describe the 'normal' biology of growth and maturation. Analyze individual somatic growth using growth charts, predict future somatic growth, and relate growth to health and physical performance.
5. Examine chronological age, sex, and maturity-related variation in somatic growth, including implications for health and physical performance.

Skill Objectives:

1. Self-directed learning and interpretation of scientific studies
2. Describe cause and effect between lifestyle and health.
3. Critically examine current issues in growth and development in our society.
4. Develop communication skills with peers and expressing objective opinions.

Course Content:

Tentative Schedule – lectures are subject to change according to class needs.

Date	General Topic		Quiz or Assignment Due
10-Jan	Outline of Course		
12-Jan	Introductory Concepts	<i>What is growth and maturation</i>	
14-Jan	Introduction Concepts	<i>Why do we study growth and maturation</i>	
17-Jan	Research Design	<i>How we design studies of growth</i>	
19-Jan	Measurement Techniques	<i>How we assess growth</i>	
21-Jan	Somatic Growth	<i>Growth charts</i>	
24-Jan	Predicting Somatic Growth	<i>Growth channelling</i>	
26-Jan	Prenatal Growth	<i>Before we were us</i>	
28-Jan	Quiz #1		January 28
31-Jan	Prenatal Growth	<i>Influences on prenatal growth</i>	
02-Feb	Prenatal Growth	<i>Normal variation in prenatal growth</i>	
04-Feb	Postnatal Growth	<i>Patterns of growth</i>	
07-Feb	Postnatal Growth	<i>Changes in body proportions</i>	
09-Feb	Endocrine System	<i>Hormones</i>	
11-Feb	Quiz #2 (Case Study)		February 11
14-Feb	Endocrine System	<i>Disturbances in the endocrine environment</i>	
16-Feb	Biological Maturation	<i>Indices of maturation</i>	
18-Feb	Biological Maturation	<i>Maturation and sport</i>	
21-Feb	Mid-term Break		
23-Feb	Mid-term Break		
25-Feb	Mid-term Break		
28-Feb	Muscular Development	<i>Muscle size and strength</i>	
02-Mar	Skeletal System	<i>Bone growth and assessment</i>	
04-Mar	Skeletal System	<i>Influence of exercise on bone</i>	
07-Mar	Skeletal Injuries	<i>Injuries and overtraining</i>	
09-Mar	Nutrition	<i>Nutrition and growth</i>	
11-Mar	Quiz #3 OR Critique		March 11
14-Mar	Nutrition	<i>Relative energy deficiency in sport</i>	
16-Mar	Adipose Tissue	<i>Adipose tissue during growth</i>	
18-Mar	Cardiovascular System	<i>Heart, blood, lungs, fitness</i>	
21-Mar	Child Athlete	<i>Training during the growing years</i>	
23-Mar	Physical Activity	<i>How active are we now</i>	
25-Mar	Pregnancy	<i>Exercise during pregnancy</i>	
28-Mar	Aging	<i>Exercise during aging; sarcopenia, osteoporosis</i>	
30-Mar	Motor Skill Acquisition	<i>Intro to motor development</i>	
01-Apr	Quiz #4 OR Mini-Paper		April 1
04-Apr	Motor Skill Assessment	<i>How we assess motor development</i>	
06-Apr	Motor Development	<i>Influences on motor development</i>	
08-Apr	Course Review		
11-Apr	Last Day of Class / Review		

Required Reading Materials:

There are no required reading materials; however, several texts below are recommended to supplement lectures and course notes.

Recommended Reading Materials:

Growth, Maturation, and Physical Activity – 2nd Edition. Robert Malina, Claude Bouchard, Oded Bar-Or. ISBN13: 9780880118828. Human Kinetics Publishers.

Several copies are available on reserve at the Taylor Family Digital Library Reference Desk.

Human Growth and Development – 2nd Edition. Noel Cameron and Barry Bogin. ISBN: 978-0-12383882-7. Elsevier.

Digital copy available through the University of Calgary Library website:

<https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=932873>

REFERENCE: KNES 259 text. Human Anatomy and Physiology – 16th Edition. Gerard Tortora and Bryan Derrickson. ISBN: 9781119704522

Assessment Components/Expectations

Grading Scale:

Letter	Percent	Grade Point Value	Description
A+	93.0-100	4.00	Outstanding
A	89.0-92.9	4.00	Excellent – Superior performance, showing comprehensive understanding of subject matter
A-	85.0-88.9	3.70	
B+	81.0-84.9	3.30	
B	77.0-80.9	3.00	Good – Clearly above average performance with knowledge of subject matter generally complete.
B-	73.0-76.9	2.70	
C+	69.0-72.9	2.30	
C	65.0-68.9	2.00	Satisfactory – Basic understanding of the subject matter. Grade point average below 2.00 is not sufficient for promotion.
C-	61.0-64.9	1.70	Minimum grade required if needed as a prerequisite course.
D+	57.0-60.9	1.30	
D	54.0-56.9	1.00	Minimal pass – Marginal performance, generally insufficient preparation for subsequent courses in the same subject.
F	0.0-53.9	0	Fail – Unsatisfactory performance of failure to meet course requirements.

Evaluation of Course Content:

Evaluations	Date	Weight
Quiz 1	January 28 on D2L; multiple choice and T/F; available 24 hrs.	15%
Quiz 2 (case study)	February 11 on D2L; case study, multiple choice and T/F; available 24 hrs.	15%
Quiz 3 OR Current events critique	March 11 on D2L; multiple choice and T/F; available 24 hrs. OR March 11 submit current events critique on D2L	15%
Quiz 4 OR Mini-research paper	April 1 on D2L; multiple choice and T/F; available 24 hrs. OR April 1 submit mini-research paper on D2L	15%
Group Engagement	Discussion board moderation	10%
Exam Period	Final exam (registrar scheduled, April 19-29)	30%
Total		100%

Quizzes (15% each): Students must write all **four** quizzes unless they choose to write the Critique and/or the Mini-Research Paper (see below). Quizzes are individual assessments and are to be completed as such. Quizzes will be one-way assessments (no going backward to view previous questions) with question order randomized. Quizzes will cover material from lectures (including additional material not provided in the course notes but discussed by the instructor and/or provided as supplemental slides). Quizzes are cumulative and will contain a small number of questions from previous modules. Students are required to have access to D2L to complete each quiz.

Special accommodations will be provided as required. Please see section on academic accommodation below for further information. Contact the instructor immediately if a technical difficulty arises that the student cannot resolve so a solution can be formulated. Students will have 40 minutes (plus 50% extra time for any technical issues) to write the quiz in D2L, for a total time of 60 minutes. Students will have a 24-hour window to write the quiz. However, once a student starts the quiz, they have 60 minutes to complete it. The instructor will be available between 9:00AM and 3:00PM on quiz days to answer questions or troubleshoot. Quizzes will become available on D2L according to the following schedule:

Quiz	Open: 12:00 am	Closes: 11:59 pm
Quiz 1	Jan 28	Jan 28
Quiz 2	Feb 11	Feb 11
Quiz 3	Mar 11	Mar 11
Quiz 4	Apr 01	Apr 01

Critique of Current Events (optional in place of Quiz #3; 15%): Students who choose this option in place of Quiz #3 must indicate their intention to do so on D2L by March 4th and submit their assignment on D2L on March 11th by 11:59 pm. Students who choose this option will identify an article or advertisement from a recent news media publication (e.g., print or on-line newspaper or magazine, not from a personal blog) that relates to growth and maturation and/or exercise during childhood. Find an article/advertisement that is of personal interest to you. The item should raise an issue that you feel requires further investigation.

Students will submit one document that contains: the original news item; your rationale for further study; evidence from three recent publications that support or refute the claims made in the publications; strategy for improving the situation identified in the article; and a list of publications and their abstracts.

A penalty of minus 10% per day will be applied to late submissions. The critiques will be graded by TAs with input and final decision on grading determined by the instructor. Further instructions and marking rubric will be posted on D2L.

Mini-Research Paper (optional in place of Quiz #4; 15%): Students who choose this option in place of Quiz #4 must indicate their intention to do so on D2L by March 25th and submit their assignment on D2L on April 1st by 11:59 pm. Students who choose this option will research and prepare a reasoned argument **clearly** in support or against one of the pre-defined Mini-Research Paper topics listed on D2L. Students must incorporate at least 3 to 4 separate arguments in support of their position and all arguments must be **evidence- and biologically-based**, and appropriately referenced.

Students will submit one document that begins with a clarification of what the theoretical basis of the question is about (e.g., explain the main concept) and then provides your position and arguments. References should be cited within the argument text and summarized on a separate reference page at the end of the document.

A penalty of minus 10% per day will be applied to late submissions. Papers will be graded by TAs with input and final decision on grading determined by the instructor. Further instructions, including topics and marking rubric will be posted on D2L.

Group Engagement (10%): In small groups (approximately 5 students per group), students will take turns moderating the KNES 355 D2L discussion board. Each group will moderate the D2L discussion board from the end of one class to the start of the next class. Groups will use the discussion board to summarize key learnings from class and share interesting links and commentary relevant to what we are discussing in class. Groups will be evaluated on the quality of their posts and responses. Groups are encouraged to post Twitter-style threads (max 280 characters) to keep posts and replies succinct. One or two groups will be assigned to moderate the discussion board each class. Further instructions and marking rubric will be posted on D2L.

Midterm Exam Policy:

The Faculty of Kinesiology policy is that all students are expected to write midterm exams on the dates listed on the course outline. Special accommodation may be granted by the instructor in **exceptional circumstances only**, which includes illness, participation in athletic events (varsity, national or international), domestic affliction, and religious conviction. It is the student's responsibility to supply proper documentation and/or notification **prior to** the originally scheduled midterm to support their circumstance. Personal travel plans and arrangements are not valid reasons for requesting a special accommodation for a midterm exam.

Final Exam:

The final examination is set by the Registrar's office (April 19-29, 2022). The exam will be 2 hours in duration. You will be permitted to bring a basic calculator into the examination room.

Late Policy:

Late assignments will automatically be reduced by 10% for every 24 hrs. late, unless prior arrangements have been made with the instructor or teaching assistant for unusual circumstances.

Additional Course Information:**Technology Requirements for Timed Assessments**

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Stable internet connection

Below are important policies you should familiarize yourself with before starting the course. Please take the time to read through this section and learn about some expected norms for our learning environment.

Respect is a key expectation in our classroom. I will respect your learning and will work to provide you with an inclusive, fair, and fun classroom experience. In return, I expect you to try your best in the course and to create authentic work.

Please do your best to direct course questions to the D2L discussion board or ask during class (chances are other students also have the same question). If you have more sensitive information to share, please direct those questions or concerns to me directly during office hours, after class, or via email.

Instructors are not responsible for issues downloading notes. For help, please consult the learning commons or IT support at 403-220-5555.

The decision to post course notes is at the discretion of instructors (and guest lecturers). Notes will be posted when available, this may not be until the lecture has concluded. Notes will only be posted as PDFs and may be incomplete. Marks posted in online are not official. Mistakes with the system are known to occur. If you notice a mistake, please contact the course instructor.

Contacting the Instructor:

Students requiring assistance are encouraged to speak with their instructor during class or office hours. If you wish to meet with the instructor outside of office hours, please email the instructor to make an appointment.

Email, while commonly used, does limit the effectiveness of communications and may not be the best way for instructors to answer student questions. Therefore, the instructor may request a telephone call or personal meeting. Your instructor will inform you as to his/her expectations about emails.

Students' Union:

The Faculty of Kinesiology representative is Areeb Qayyum and can be reached at kinesrep@su.ucalgary.ca.

Supplementary Course Information

Plagiarism/Cheating/Other Academic Misconduct

(see Calendar <https://www.ucalgary.ca/pubs/calendar/current/k.html>):

A **single** offence of cheating, plagiarism or other academic misconduct is a serious act that will not be tolerated in the Faculty of Kinesiology. Penalties for such acts will be determined by the Dean and may result in a failing grade, probation, suspension, or expulsion. Any student who is uncertain if an action falls into this category should consult the instructor and/or the Calendar in advance.

Academic Accommodation Policy and Information on Student Accessibility Services:

It is the student's responsibility to request academic accommodation. If you are a student with a documented disability who may require academic accommodation and have not registered with Student Accessibility Services, please contact their office at 403-220-8237. You are also required to discuss your needs with your instructor preferably within the first fourteen (14) days of this course. Students who have not registered with Student Accessibility Services **are not** eligible for formal academic accommodation. For further information, go to <http://www.ucalgary.ca/access/>.
[ucalgary.ca/student-services/access/prospective-students/academic-accommodations](http://www.ucalgary.ca/student-services/access/prospective-students/academic-accommodations).

Accommodations on Protected Grounds other than Disability:

Students who require an accommodation in relation to their coursework or to fulfil requirements for an undergraduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to Jodie McGill, Team Lead Student Advising at jdmcgill@ucalgary.ca. Students who require an accommodation unrelated to their coursework or the requirements for an undergraduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Vice-Provost (Student Experience). For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.
<https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf>

Intellectual Property:

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Freedom Of Information and Protection Of Privacy Policy:

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary. The University of Calgary is under the jurisdiction of the Provincial Freedom of Information and Protection of Privacy (FOIP) Act. Please refer to the website for further details.
<https://www.ucalgary.ca/legal-services/access-information-privacy>

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf>) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy <https://www.ucalgary.ca/pubs/calendar/current/k.html>.

Internet and Electronic Communication Device Information:

Any surfing of the Internet during lectures that is not directly related to the class discussion is distracting and strictly forbidden. Additionally, the use of any electronic devices (i.e., cellular phones) for emailing, texting, etc., is strictly prohibited. Please turn **OFF** your phone before the beginning of each lecture unless permitted. Instructors have the authority, at the discretion of the Dean to require that specific course assignments, term papers and academic exercises be submitted in an electronic format.

<https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-electronic-resources-and-information-policy>

Library and Resources in the Library:

Visit the University of Calgary's library at <http://library.ucalgary.ca/>.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive support when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through Student Wellness Services (Room 370 MacEwan Student Centre,

<https://www.ucalgary.ca/wellness-services/services/mental-health-services>) and the Campus Mental Health Strategy (<http://www.ucalgary.ca/mentalhealth/>).

Sexual Violence Policy

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's sexual violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at <https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy>

Student Success

The Student Success Centre provides services and programs to ensure students can make the most of their time at the University of Calgary. Our advisors, learning support staff, and writing support staff assist students in enhancing their skills and achieving their academic goals. They provide tailored learning support and advising programs, as well as one-on-one services, free of charge to all undergraduate and graduate students. For more information visit: <https://www.ucalgary.ca/student-services/student-success>

Student Ombuds Office

The Student Ombuds Office supports and provides a safe, neutral space for students. For more information, please visit www.ucalgary.ca/ombuds/ or email ombuds@ucalgary.ca

Student Union (SU) Information

The SU Vice-President Academic can be reached at (403) 220-3911 or suvpaca@ucalgary.ca; Information about the SU, including elected Faculty Representatives, can be found here: <https://www.su.ucalgary.ca>

Graduate Students' Association (GSA) Information

The GSA Vice-President Academic can be reached at (403) 220-5997 or gsa.vpa@ucalgary.ca; Information about the GSA can be found here: <https://gsa.ucalgary.ca>

Emergency Evacuation/Assembly Points

Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary's Emergency Management website: <http://www.ucalgary.ca/emergencyplan/assemblypoints>

Safewalk

Campus security will escort individuals, day or night, anywhere on campus (including McMahon Stadium, Health Sciences Centre, Student Family Housing, the Alberta Children's Hospital and the University LRT station). Call 403-220-5333 or visit <http://www.ucalgary.ca/security/safewalk>. Use any campus phone, emergency phone or the yellow phone located at most parking lot pay booths. Please ensure your personal safety by taking advantage of this service.