



**Land Acknowledgement:**

We respectfully acknowledge the Syilx Okanagan Nation and their peoples, in whose traditional, ancestral, unceded territory UBC Okanagan is situated.

**Course Code and Title:** HES381 Body Composition

**Faculty:** Faculty of Health and Social Development

**Department:** Health and Exercise Sciences

**Instructor(s):** Ali McManus

**Instructor(s) Email:** ali.mcmanus@ubc.ca

**Duration:** Term 2 Winter 2024

**Delivery Modality:** In-Person

**Course Location:** LIB 312

**Course Days:** Tuesday

**Class Hours:** 8:00 to 11:00am

**Office hours:** One-on-one or group meetings are available by appointment – please contact me via the Canvas email system to arrange office hours.

**Other Instructional Staff:** Teaching Assistants: Cori Calkins and Roddie Sandilands

**Course Description:** Body composition, with particular emphasis on the influence of physical (in)activity. Techniques for measuring the amounts of adipose tissue, muscle, and bone in the body.

**Course Structure:** This course is taught as a semi ‘flipped classroom’ to allow the practical component.

**Course Overview, Content and Objectives:** There has never been a time when body composition has held such a prominent place in our society. Science, history, culture and economics all drive our obsession with our bodies. Body composition is at the root of many of our most pressing health challenges, but it is also an industry that sustains nutrition and fitness businesses around the globe.

We are going to dissect body composition from a biological perspective, as well as consider how our environment interconnects with body composition. The biology of our bodies helps us understand how we are composed, how this has changed over time, and alterations with aging, exercise and nutrition. Our environment shapes how we see our bodies and the approaches we take to manipulating body composition. There is a strong emphasis on measurement in this course, which is delivered via a practical component using a semi flipped classroom. The practical component of this course provides an appreciation of the diversity of bodies, how we measure individuals and the error inherent to all measures of body composition.



**Learning Outcomes or Objectives:** Upon successful completion of this course, students will be able to:

1. Contrast our evolutionary past with our contemporary bodies.
2. Explain the ‘nuts and bolts’ of the components of the human body and the principles underlying their measurement.
3. Provide an evidenced based debate of the interface between body composition, exercise and nutrition.
4. Demonstrate competency in the assessment and application of measurement error in body composition.
5. Demonstrate the ability to assess body composition following the ISAK Level 1 Anthropometric standards.
6. Improve your ability to “think outside the box” by recognizing your own biases toward body composition and questioning the assumptions, concepts and ideas you have previously taken for granted.

### Methods of Assessment

Assessment Task	Details	Weighting in final course grade (%)	Learning Outcomes
Quiz x 2	Each quiz is worth 30%	60%	1-4
21 Day Challenge	You will explore the challenge of habits that relate to body composition by trying something new or changing a habit for at least 21 days.	20%	6
Practical Exam	You will be assigned skinfolds (6), girths (3) and a body breadth (1) to measure on a body already measured by the criterion measurer (Ali). 2 marks per measurement (intra and inter-tester variability) if with the prescribed limits.	20%	4,5



Course Schedule

Week	Theory & Online Content	In-class Practical content	Whole class / Groups	Weekly Deadlines
Week 1 Jan 7	<p><b>Introduction to the course</b></p> <p><b>Our evolutionary past</b></p>		<b>WHOLE CLASS</b>	PODCAST
Week 2 Jan 14	<p><i>Online:</i> PODCAST</p> <p><a href="https://www.youtube.com/watch?v=Tn1w7Kw8x5E">https://www.youtube.com/watch?v=Tn1w7Kw8x5E</a></p>	Landmarking: the restricted profile	<p><b>PRACTICAL GROUPS</b></p> <p><b>8:00-9:30</b></p> <p><b>9:30- 11:00</b></p>	<p>PODCAST</p> <p>Reading 1</p>
Week 3 Jan 21	<p><b>Deconstructing the body</b></p> <p><b>8:00-9:00</b></p>	Skinfolds: technique and landmarking	<p><b>PRACTICAL GROUPS</b></p> <p>9:00-10:00</p> <p>10:00-11:00</p>	Reading 2
Week 4 Jan 28	<p><b>Man &amp; measurement</b></p> <p><b>8:00-9:00</b></p>	Skinfolds - practice	<p><b>PRACTICAL GROUPS</b></p> <p>9:00-10:00</p> <p>10:00-11:00</p>	Reading 3



Week 5 Feb 5	<b>Contemporary Bodies</b> 8:00-9:00	<b>PRACTICAL</b> Girths & Bony breadths	<b>PRACTICAL GROUPS</b> 9:00-10:00 10:00-11:00	Reading 4
Week 6 Feb 11	<i>Online:</i> <b>PODCAST</b> <a href="https://www.youtube.com/watch?v=iIMWQBb_qVY&amp;t=244s">https://www.youtube.com/watch?v=iIMWQBb_qVY&amp;t=244s</a>	Full profile	<b>PRACTICAL GROUPS</b> 8:00-9:30  9:30- 11:00	PODCAST  QUIZ #1 Content Weeks 1-5  * Closes Sunday 21 Feb 11:59pm
READING BREAK FEB 17-21				
Week 7 Feb 25	<b>Changing Body Composition</b> 8:00-9:00	Full profile	<b>PRACTICAL GROUPS</b> 9:00-10:00  10:00-11:00	Reading 5
Week 8 March 4	<i>Online:</i> <b>PODCAST</b> Protein/ muscle 32 minutes <a href="https://www.youtube.com/watch?v=AVOKWvYJM-c">https://www.youtube.com/watch?v=AVOKWvYJM-c</a>	Full profile	<b>PRACTICAL GROUPS</b> 8:00-9:30  9:30- 11:00	PODCAST  Reading 6
Week 9 March 11	<b>Error &amp; error calculation Part I</b> 8:00-9:00	Full profile	<b>PRACTICAL GROUPS</b> 9:00-10:00  10:00-11:00	Practice TEMS  Reading 7
Week 10 March 18	<b>Error &amp; error calculation Part II</b>	Full profile	<b>PRACTICAL GROUPS</b> 9:00-10:00  10:00-11:00	Practical exam
Week 11	<b>PRACTICAL EXAM</b>			



March 25			
Week 12 April 1	Course wrap up & Revision	<b>WHOLE CLASS</b>	QUIZ #2 Content weeks 6-11  *Closes Sunday April 13, 11:59pm  21-Day Challenge *Closes Sunday April 20, 11:59pm

**Learning Materials**

All required readings for this course will be available via Canvas. Under the weekly module within Canvas you will see a "weekly prep" section. In this section you will find links to all of the required readings and assigned videos that are freely available.

**Other Course Policies:**

**Late policy:** For each day late 5% is deducted.

**UBC Values**

UBC creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada, and the world. UBC’s core values are excellence, integrity, respect, academic freedom, and accountability.

**Policies and Regulations**

Visit [UBC Okanagan’s Academic Calendar](#) for a list of campus-wide regulations and policies, as well as [term dates and deadlines](#).

**Academic Integrity**

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are



imposed. For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the course. Careful records are kept to monitor and prevent recidivism.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the [Academic Calendar](#).

### **Academic Misconduct**

The academic enterprise is founded on honesty, civility, and integrity. Violations of academic integrity (i.e., [academic misconduct](#)) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred for consideration for academic discipline. Careful records are kept to monitor and prevent recurrences. Any instance of cheating or taking credit for someone else's work, whether intentionally or unintentionally, can and often will result in at minimum a grade of zero for the assignment, and these cases will be reported to the Head of the Department and Associate Dean Academic of the Faculty.

### **Student Service Resources:**

#### **Walk-In Well-Being Clinic**

The Walk-In Well-Being clinic offers no-fee, brief, single-session psychological services. Sessions are led by a doctoral student in clinical psychology and supervised by a registered psychologist (UBCO Faculty member). Clinicians can provide support with stress management, sleep, self-care, depression, anxiety, interpersonal issues, substance misuse, coping with academic demands/stressors, and provide options for connecting to additional resources. Virtual or in-person sessions are available at the UBCO Psychology Clinic, located in ASC 167 with or without an appointment, on Tuesdays and Thursdays between 10 am and 3 pm from September to June, excluding campus closures.

UNC 337      250.807.8421 (ext. 1)

Email: [ipc.ok@ubc.ca](mailto:ipc.ok@ubc.ca)

Web: <https://psych.ok.ubc.ca/psychology-clinic/walk-in-wellness/>

#### **Student Supports, Resources & Campus Services**

Visit the [Student Support and Resources page](#) to find one-on-one help or explore resources to support your experience at UBC Okanagan, as well as many other campus services available to all students.

#### **Advising Options**

Visit the [Advising Options page](#) to find out about the variety of advising options available to students including but not limited to academic, career and accessibility.



## Safewalk

Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call Safewalk at **250-807-8076**.

Web: [www.security.ok.ubc.ca](http://www.security.ok.ubc.ca)