

UNIVERSITY OF BRITISH COLUMBIA – SCHOOL OF KINESIOLOGY

COURSE SYLLABUS

Course Code and Title: KIN232 (previously KIN489H) – Nutrition, Physical Activity, and Health 2022W2
Course Structure: Class will be in person from 11 - 12.30pm in SWING 121 (Note: these classes will not be recorded). Occasionally material may be delivered online where guest speakers are not in Vancouver or the material lends itself better to a pre-recorded class. Advance notice will be given for these occasions: **Class on Jan 17th is a pre-recorded class which will be made available on canvas.**
Reading break is Feb 20th - 24th.
Instructor Name: Emma McCrudden emma.mccrudden@ubc.ca
Teaching Assistant: Your TAs: Joanna Tu (joanna.tu@ubc.ca) and Cassandra Kell-Cattrysse (ckellcat@student.ubc.ca)
Office Hours: Office Hours will be on Zoom from 9.30 – 10.15 on Mondays starting Jan 16th

WHO DO I CONTACT IF I HAVE QUESTIONS?

Questions should first be directed to your TA and are welcome through email or canvas. Questions through email may take up to 48hrs to receive a response. I do not check email on weekends. **Please include your course name (i.e., KIN232) and your full name in the subject line.**

COURSE DESCRIPTION

This course offers an introduction to the application of nutrition to physical activity and health. Students will learn about a range of topics including macro- and micronutrient classification and recommended daily intakes, their digestion, absorption, and functions in the body and their role in supporting physical activity. Students will also learn about the implications of nutrient imbalances and the impact of this on physical activity and ultimately health. Emphasis is placed on the Kinesiologists scope of practice in relation to nutrition advice and collaboration with other nutrition professionals.

RATIONALE

The foods we eat, the nutrients within certain foods and their destiny once they are eaten have remarkable effects on our overall health and well-being throughout life. In recent years, public awareness of the intimate relationship between nutrition and physical activity in improving health and lowering disease risk has greatly improved. Individuals working in the health industry in any capacity should have a basic understanding of this relationship in order to promote overall wellness.

AIMS AND OUTCOMES

Students will be confident in their understanding of the fate and functions of macro and micronutrients in human health and subsequent impact on physical activity. Students will also be introduced to dietary assessment and dietary requirements for health and exercise. In addition, nutritional considerations for select populations will be covered.

EDUCATIONAL OUTCOMES

- Improved awareness of the current landscape of health concerns related to nutrition
- The role nutrition interventions have in improving health including supporting physical activity
- Understand the concept of energy balance to optimize health and well being
- Understand the sources, fates and functions of macro and micro-nutrients upon ingestion and their role in supporting physical activity
- Become familiar with software used when designing nutrition plans
- Appreciate the impact of over- or under- consumption of nutrients on health within specific populations and necessary dietary modifications
- Develop skills required to work as part of a group

It is important for all humans to have fundamental knowledge in the basics of nutrition in order to live a healthy life. In addition, specific education in the area of nutrition is beneficial in a number of occupations

including health promotion, nutrition or dietetics, the health and fitness industry, medicine and rehabilitation. Throughout this course, students will be tasked with converting scientific literature into useful, practical, comprehensible changes in order to develop their communication skills. Students will have enhanced awareness of the relationship between nutrition and other areas within the kinesiology field.

SPECIFIC LEARNING OBJECTIVES

Upon completion of this course students will be able to:

1. Describe the basic principles of exercise and minimum recommendations for health
2. Summarize principles of energy metabolism and energy systems
3. Identify various classes of nutrients
4. Explain the functions of macro- and micronutrients and their role in supporting physical activity and health
5. List the principal functions of water and electrolytes in the human body
6. Appreciate the challenges faced when designing nutrition plans for the general population and those with special considerations

CLASS FORMAT

Class will primarily be delivered in person. Occasionally alternate media (i.e., video recording or podcast) will be used in place of a lecture to compliment that week's topic. It is strongly encouraged that as part of group work, groups meet outside of class to complete necessary work in a timely manner with a shared workload.

ATTENDANCE

Although attendance is not formally taken, regular attendance to lectures is strongly encouraged to stay on top of material. You are responsible for all material covered in class and any information given whether in attendance or not. You are also responsible for getting your own notes from class as well as information pertaining to changes in the course outline, readings, assignments, and any tests or exams.

EMAIL

Questions should first be directed to the TA and are welcome through email . Please be aware that I do not check emails over the weekend and during the week, it may take up to 48hrs to respond to your email. It is essential to include your name and course (i.e. KIN232) in the subject line due to the volume of emails from students.

TECHNOLOGY IN THE CLASSROOM

Electronic devices such as computers (desktop, laptop) or tablets (ipads, etc.) will be needed for this course. These devices create the temptation to surf the web, check e-mail, etc. so please make sure that you are focused on what is happening in the classroom and engaged in the discussion. You may wish to use a productivity extension platform such as StayFocusd to limit the amount of time that you can spend on certain websites.

Other distractions should be minimized during class times as well. For example, cell phones should be muted.

CLASS NOTES

Lecture slides will be made available in PDF file format through the course website. Please keep in mind that these notes provide an overview of what will be covered and do not contain information related to discussions, assignments, or detailed examples, which will be covered in the lecture.

POLICIES AND EXPECTATIONS

Academic Accommodation for Students with Disabilities

The University's goal is to ensure fair and consistent treatment of all students, including students with a disability, in accordance with their distinct needs and in a manner consistent with academic principles. Students with a disability who wish to have an academic accommodation should contact The centre for Accessibility without delay.

Academic Integrity

All UBC students are expected to behave as honest and responsible members of an academic community. Breach of those expectations or failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action. It is your responsibility to become familiar with the University of British Columbia's Academic Honesty and Plagiarism Policies, as well as the Student Declaration and the consequences of violating these policies.

Copyright:

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline.

READINGS AND RESOURCES

Students are responsible for all readings assigned in the course syllabus and during class time. Assigned empirical research and review articles are meant to develop student's understanding and provide examples of concepts discussed in class. Thus, they will not usually be directly examined, but completion of these readings will enhance knowledge of the course material. Should a recommended reading be included in formal assessment, I will make this very clear in lectures. Additional readings, information about this course, handouts, and important reminders will be made available in Canvas.

Supporting text: Spano M., Kruskall L., Thomas D.T. *Nutrition for Sport, Exercise and Health*. Champaign, IL: Human Kinetics; 2018

Those who want to further enhance their understanding of nutrition and its role in physical activity will benefit from the following text:

Lanham-New S, Stear S, Shirreffs S, Collins A. *Sport and Exercise Nutrition*. The Nutrition Society Textbook Series: Wiley-Blackwell; 2011.

EVALUATION

Weekly quiz (30%)

Format

Online tests

Details

Students will complete 7 short online quizzes, but only your highest grade from 6 tests will count towards your grade. Each quiz is worth 5%. Each test will take ~15 minutes to complete and consist of 10 multiple choice questions. Further information on the topics and format will be provided on canvas. These quizzes will not be reopened.

Due Date

Please see canvas and pay careful attention to due times and dates

Weighting

30%

Learning Outcomes

Assess student's retention and comprehension of basic material covered

Group Assignment (25%)

Format

Fad Diets

Written submission

Details

Students will be asked to review a dietary trend; answer questions related to the trend and prepare a meal plan for an individual following this diet using a nutrition analysis software program. Peer evaluation is also required.

Due Date

Group update February 10th Final assignment hand in March 10th

Weighting

20% towards overall mark + 5% peer awarded mark

Learning Outcomes

This will test the students' ability to critically review emerging dietary trends and evaluate their suitability for use with the general population.

Final Exam (35%)

Format

Final Exam

Multiple choice, short answer questions

Details

Questions will be based on material covered throughout the term with more critical thought needed to answer topics

Due Date

TBD

Weighting

35% towards overall mark

Learning Outcomes

Test students understanding of material throughout the course and the ability to link these core concepts together

Participation (10%)

Format

Online

Details

Throughout the term you will be assigned tasks related to the material taught to encourage participation and engagement. This may include engagement in discussion boards, uploading images / text of examples related to material taught and general sharing of information.

Due Date

Throughout the term

Weighting

5 discussions worth 2% each - 10% towards overall mark.

Learning Outcomes

To encourage discussion and retention of information and incorporate knowledge acquired about nutrition into everyday life

GRADING

- **Weekly class tests** will be made available after the topic has been covered. Please consult canvas for due dates. Only one attempt will be permitted. If a valid reason (i.e. emergency medical or family emergency) is given for missing the test at least 1 day prior; marks will automatically be added to the final exam. **Otherwise, failure to complete the test will result in a mark of zero being awarded. I would strongly advise that you submit well in advance of the deadline to allow for any uploading delays.**
- **Group assignment:** Extensions **will not** be provided for any reason as the due date is clearly outlined from the beginning of term and students are expected to make sure they are organised to submit on time. In case of a medical or serious family emergency an appropriate medical certificate must be submitted. Late submission penalties will apply and will be clearly outlined the assignment.
- **Final:** Students absent from final examinations held in the official examination period must request academic concession from their specific advising office.
- Students should retain a copy of all submitted assignments (in case of loss) and should also retain all their marked assignments in case they wish to apply for a Review of Assigned Standing.
- Students have the right to view their marked examinations with their instructors, providing they apply to do so within a month of receiving their final grades. This review is for pedagogic purposes. The examination remains the property of the university.

POLICY ON TEXT-MATCHING SOFTWARE

UBC subscribes to Turnitin, an online system that compares written material with the Web and with other material submitted to its database. Faculty, staff and students can upload submissions and check for duplication of material in other sources and possible plagiarism.

TENTATIVE COURSE SCHEDULE

The topics for each class are listed below. Throughout the course, the assigned topics for discussion during each lecture may deviate slightly, due to time constraints, but every effort to maintain the schedule below will be made.

<i>Date</i>	<i>Topic</i>	<i>Further reading in Spano text</i>
Week 1	Course introduction and Nutrition Landscape	Chapter 1
Week 2	Energy systems & Introduction to carbohydrates and related conditions	Chapter 2 & 3
Week 3	Fats and their role in health	Chapter 4
Week 4	Protein and its role in health	Chapter 5
Week 5	Introduction to select vitamins and assessment	Chapter 6
Week 6	Introduction to select minerals and assessment	Chapter 7
Reading break		
Week 7	Water and electrolytes for physical activity and health	Chapter 8
Week 8	Changing body weight and body composition	Chapter 10 & 13
Week 9	Nutrition for specific populations	Chapter 14
Week 10	Student Selected Topics	
Week 11	Microbiome & Student Selected Topics Continued	
Week 12	Role of the dietitian in Elite Sport & Review	Chapter 9
Week 13	Review	