COURSE SYLLABUS

**Course Code and Title:** FNH474 – Sport Nutrition

**Class times:** Tuesday and Thursday 2:00 – 3:30pm

**Location:** MCLD building Floor 2 Room 2002

**Instructor Name:** Alysha L Deslippe

**Instructor Email:**

**TA:** Mathilde Wilhelmy, RD, MSc student

**TA Email:**

**COURSE DESCRIPTION**

Nutritional needs of athletes, including energy, carbohydrate and protein; hydration; pre-and post-event nutrition, weight management and body composition issues; ergogenic aids; sports-specific guidelines; and special athlete populations.

***Prerequisites:*** FNH 350 and FNH 351.

**RATIONALE**

Elite athletes and the highly active population subject their bodies to given workloads with the desired outcome of achieving improvements in an aspect of performance or for personal enjoyment. Appropriate dietary advice and modification can support these groups in achieving their goals while minimizing the risk of illness, injury, underperformance or development of unfavorable eating behaviours. The sport nutrition industry is a very lucrative market and as a result there is lots of misinformation available. We will cover evidence-based sources of information and strategies to point others towards them.

**COURSE LEARNING OBJECTIVES**

After participating in FNH 474 students will be able to:

1. Describe the functions of fundamental macronutrients in relation to health and sports performance and consequence when they are not met
2. Describe the functions of fundamental micronutrients in relation to health and sports performance and consequence when they are not met
3. Manipulate macronutrient distributions in relation to an athletes’ training goal (e.g., strength, endurance, intermittent, weight category)
4. List the role of hydration in an athletes’ health and performance
5. Describe consequences of dehydration and strategies to avoid it
6. Evaluate the efficacy and safety of selected sport supplements in high performance sport
7. Explain differences in professionals’ approaches to counselling individual athletes and teams on their nutrition goals
8. Explain concerns that athletes face when it comes to their relationship between their health, well-being, performance and dietary habits (e.g., risk of disordered eating, impaired immune function)
9. List evidence-based sources of sports nutrition information

Throughout this course, students will be tasked with converting scientific literature into useful, practical, comprehensible changes. Students will also have opportunities to practice collaborative group work.

**CLASS FORMAT**

The course will include in-person meetings twice per week. These meetings include a combination of lectures, discussions, activities, and group presentations. At certain points in the term, we will have guest lectures. 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. When time permits, there may be class time to discuss group work. Please refer to the class schedule for important dates.

***Course Readings***

Required readings and on-line resources needed to prepare for class are listed on the syllabus with links provided on Canvas. You do not need a textbook for this course.

***Educational Strategies***

To help maximize student learning this course will rely on active participation as much as possible. Students are expected to come prepared for class and participate in all discussions and activities. To help maximize students time spent actively learning this course has 2 main features:

1. **Monthly activity days:** Including attendance and active participation in class activities on these days.
2. **Group project:** In an assigned group you will work to research a hot topic in the sports nutrition field, preparing a short presentation, lay infographic and policy brief.

Some weeks will require students to reading content in advance of class meetings. It is expected that students complete all assigned readings prior to the meeting(s) when this is the case. Refer to the course guide for which weeks this will apply.

***Communication***

Regular communication is critical for student’s success in this course. To help facilitate constant channels of communication this course will use:

1. Weekly discussion boards on Canvas to enable students to post questions and to exchange thoughts and ideas or comments about the course content or assignments for a given week. Students are encouraged to respond to each other. The instructor and TA will also monitor this channel.
2. Canvas announcements will be updated to alert students to time-sensitive or critical course items. Please check the Canvas on a regular basis.
3. Emails between the instructor for any issues of personal nature. Emails should be answered within a time frame of 24 hours. This might change if your email has been sent on a weekend or holiday.
4. Office hours: Instructor office hours will occur on Tuesdays and Thursdays form 4:00-5:00pm in FNH 312. During this time a zoom link will also be available for students to use:

**CLASS POLICIES**

***Attendance***

We expect you to be present and prepared for all class meetings. If you are unable to attend a scheduled class because of illness or emergency, you are responsible for any material presented in class. UBC’s policy regarding illness and accommodations are available at [http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,48,0,0.](http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3%2C48%2C0%2C0) You are expected to contact the instructor for any absence that requires accommodation.

Attendance for participation marks will only be collected on the monthly Activity Days.

***Academic Accommodation***

This course will follow the policies regarding accommodation set out by the University for students with disabilities ([http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,34,0,0](http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3%2C34%2C0%2C0)), when academic concession is required ([http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,48,0,0](http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3%2C48%2C0%2C0)) and regarding religious accommodation:

<https://senate.ubc.ca/J-136_Religious-Cultural-Observances_20200415_0/>

In resolving any discrepancy regarding policies for this course, Academic Calendar regulations and University policy take precedence.

***Policy Regarding Late or Missed Assignments***

Please contact the instructor immediately if you miss any of the assignments. Unless for a compelling reason (e.g., illness or personal distress) students will be given a grade of zero if they miss an assignment. Arrangements must be made with the instructor to make up for the missed assessment. Late assignments will be deducted 10% off the given mark per day that they are late.

***Policy Regarding Missed In-Class Engagement Activity***

Since in-class engagement activities are designed for evaluating students’ learning and participation for each session, there will be no opportunity to make up for an engagement activity, unless in compelling circumstances (e.g., illness, personal distress, etc.). Please be in touch with the instructor. Students will be given a grade of zero for each activity missed.

***Policy Regarding Re-read of Assignments***

University of British Columbia’s students have the right to request a grade review or to appeal grades. If you have concerns or need explanation about grading of your assignment, you may request a re-read within two weeks after an assignment is marked. To request a re-read, clearly identify the sentences in your assignments in a separate sheet and for each, explain why you think you should receive extra mark(s). Submit the sheet to the instructor/TA prior to the meeting. Your marks can go up, down or stay the same. If the TA has marked your assignment, you must submit this first to the TA. If there are still concerns with marking, afterwards you may contact the instructor.

***Academic Integrity***

Please be aware that there is a zero tolerance for plagiarism or cheating of any kind. If this occurs a student will receive a “no credit” grade on an assignment, and in certain cases failure to complete the course.

Students and instructor have the important responsibility of maintaining the integrity of learning and teaching relationship, which is characterized by honesty, fairness and mutual respect. Academic integrity is a fundamental value at the University of British Columbia. The academic fraud and dishonestly are defined as actions that compromise academic integrity and consequences of such acts, which are available at: [http://www.calendar.ubc.ca/vancouver/?tree=3,286,0,0](http://www.calendar.ubc.ca/vancouver/?tree=3%2C286%2C0%2C0)

Any academic misconduct is taken seriously and is punishable by appropriate disciplinary action at the University of British Columbia. Students should be familiar and abide by the regulation on academic conduct which outlines the kinds of actions that constitute *fraud including, plagiarism or cheating, submitting works that are not fully the student’s own, presenting results that are falsified or fabricated, copy or allowing others to copy one’s work, submitting the same work or the large part of the same work in more than one course, falsifying academic evaluations, unauthorized aids in assignments, submitting work prepared in collaboration with others when such collaborations have not been allowed*. Plagiarism is defined by the UBC Calendar as “intellectual theft (that) occurs when an individual submits or presents the oral or written work of another person as his or her own.” (The University of British Columbia. Calendar 2008/09, p.59). Plagiarism is a growing concern at UBC, as indicated in the following statement from the website of UBC’s Vice President Academic:

“Fortunately, the Internet, which has made plagiarizing easier, also provides a system for possible detection. As one part of an institutional response to the issue of plagiarism, [UBC has subscribed to an electronic service called TurnItIn](https://www.grad.ubc.ca/faculty-staff/policies-procedures/turnitin). While the focus is primarily on this Internet-based service, information is also provided about the larger context in which plagiarism must be addressed, including [UBC Policies on Plagiarism](http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3%2C54%2C111%2C959) and suggestions on [Reducing Plagiarism](https://www.grad.ubc.ca/faculty-staff/policies-procedures/preventing-plagiarism).”

If you have not already done so, you should familiarize yourself with UBC’s policies, and the steps you can take to avoid plagiarism. The UBC Library has an excellent site on plagiarism, with links to online tutorials <http://help.library.ubc.ca/planning-your-research/academic-integrity-plagiarism/>.

Although plagiarism of written work can now be detected through services such as TurnItIn, it is more difficult to detect situations when students use the work of others (including their fellow students) when completing individual assignments. Studying with others or discussing issues with them is completely legitimate and is encouraged; **however, collaborating with others while completing individual assignments or sharing unauthorized material is not****.**

The use of generative AI tools, including ChatGPT and other similar tools, to complete or support the completion of any form of assignment or assessment in this course is not allowed and would be considered academic misconduct.  

**STUDENT EVALUATIONS**

Your final grade will be calculated out of 100 and will then be converted using the University of British Columbias’s grading system.

For all Canvas assignments students must include page numbers at the bottom and their full name and student number at the top. Please upload only PDFs or Microsoft Word documents into Canvas. Pages documents will not be graded.

**COURSE EVALUATIONS**

In the middle of the term and at the end of the term students will have an opportunity to provide feedback to the instructor on the course. At any time, students may send the instructor an email or speak in person about anything related to course admin and/or content for feedback.

|  |  |  |
| --- | --- | --- |
| **Component** | **Weight** | **Due Date (2025)** |
| Assignment #1Canadian Centre for ethics in sport (CCES) online training module | 5% | Feb 6 |
| Midterm (in-person) | 25% | Feb 13 |
| Assignment #2 Group Presentations | 10% | Apr 1  Apr 3 |
| Assignment #3 Group Policy Brief | 8% | Apr 8 |
| Assignment #4 Group Infographic | 5% | Apr 8 |
| Group peer evaluations | 2% | Apr 8 |
| Final exam (in-person) | 35% | TBD |
| Activity Day Participation | 5% | Jan 23  Feb 25  Mar 20  Apr 8 |
| Online Mini Quizzes | 5% | Jan 14  Feb 6  Mar 13 |

Details of each assignment and evaluation item can be found on Canvas in the assignment tab.

**COPYRIGHT**

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor (Alysha L Deslippe) or licensed to be used in this course by the copyright owner. Materials have been adapted from the previous materials from the course developed by Dr. Eric Williamson and Dr. David Wright with permission.

Redistribution of these materials by any means without the permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline. Note that only the course instructor is permitted to share the class content of any kind.

**TENTATIVE COURSE SCHEDULE**

The topics and assigned readings for each class are listed below, although this may be subject to change. Where possible, reasonable notice will be given.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Date** | **Topic** | **Pre-reading** | **Assessment** |
| 1 | Jan 7  Jan 9 | Introduction to Sports Nutrition  Physiology of Exercise | American College of Sport Medicine, Academy of Nutrition and Dietetics D of C, Thomas D, Erdman K, Burke L, American College of Sport Medicine, Academy of Nutrition and Dietetics D of C. Nutrition and Athletic Performance. Med Sci Sports Exerc. 2016;48(3):709–32.  Hughes DC et al. Adaptations to endurance and strength training. Cold Spring Harb Perspect Med. 2018;8(6):1–17. |  |
| 2 | Jan 14  Jan 16 | Energy Balance & Availability  Fueling with Carbohydrate | Burke LM et al. Carbohydrates for training and competition. J Sports Sci. 2011;29(Supp 1):S17-27. | Mini Quiz #1 |
| 3 | Jan 21  Jan 23 | Fueling with Fat  Activity Day #1 | Burke LM. Re-Examining High-Fat Diets for Sports Performance: Did We Call the ‘Nail in the Coffin’ Too Soon? Sport Med. 2015;45(Supp 1):S33-49. | Groups assigned |
| 4 | Jan 28  Jan 30 | Protein (Dr. J McKendry)  Fluids & Hydration | Jäger R et al. International Society of Sports Nutrition Position Stand: Protein and exercise. J Int Soc Sports Nutr. 2017;14(1):1–25.  Convertino V et al. ACSM Position Stand: Exercise and Fluid Replacement. Med Sci Sports Exerc. 1996;1–7. | Group selects topic |
| 5 | Feb 4  Feb 6 | Vitamins & Minerals | Carlsohn A et al. Position of the working group sports nutrition of the german nutrition society (Dge): Minerals and vitamins in sports nutrition. Ger J Sport Med. 2020;71:208–15.  https://www.eatright.org/fitness/sports-and-athletic-performance/advanced/vitamin-needs-of-athletes | Mini Quiz #2 &  CCES certificate |
| 6 | Feb 11  Feb 13 | Review  Midterm |  | Midterm |
| 7 | Feb 18  Feb 20 | Reading week (no classes) |  |  |
| 8 | Feb 25  Feb 27 | Activity Day #2  Supplements | Close GL et al. “Food First but Not Always Food Only”: Recommendations for Using Dietary Supplements in Sport. Int J Sport Nutr Exerc Metab. 2022;32(8):371–86. |  |
| 9 | Mar 4  Mar 6 | Supplements (Dr. J McKendry)  Considerations: life stage (Dr. J McKendry) | Mountjoy M et al. IOC Consensus Statement on Training the Elite Child Athlete". Clin J Sport Med. 2008;18:122–3.  Kreider RB, et al. International Society of Sports Nutrition position stand: Safety and efficacy of creatine supplementation in exercise, sport, and medicine. J Int Soc Sports Nutr. 2017;14(1):18–36. |  |
| 10 | Mar 11  Mar 13 | Considerations: endurance vs. strength sports | Burke LM et al. Toward a common understanding of diet-exercise strategies to manipulate fuel availability for training and competition preparation in endurance sport. Int J Sport Nutr Exerc Metab. 2018;28:451–63.  Payne J et al. Nutritional Considerations for the Power Athlete. Curr Sports Med Rep. 2022;21(7):224–31. | Mini Quiz #3 |
| 11 | Mar 18  Mar 20 | Considerations: male vs. female athletes  Activity Day #3 | https://www.ais.gov.au/\_\_data/assets/pdf\_file/0005/1085099/36945\_Pregnancy-Fact-Sheet\_D3.pdf  \*\*Nutrition section only  DeFeciani L. Eating Disorders and Body Image Concerns Among Male Athletes. Clin Soc Work J. 2016;44(1):114–23. |  |
| 12 | Mar 25  Mar 27 | Disordered eating and RED-S  Assessing body weight in safe ways | Mountjoy M et al. 2023 International Olympic Committee’s (IOC) consensus statement on Relative Energy Deficiency in Sport (REDs). Br J Sports Med. 2023;57(17):1073–97.  Turocy PS et al. National athletic trainers’ association position statement: Safe weight loss and maintenance practices in sport and exercise. J Athl Train. 2011;46(3):322–36.  \*\*OPTIONAL (but very cool) Bratland-Sanada S, Sundgot-Borgen J. Eating disorders in athletes: Overview of prevalence, risk factors and recommendations for prevention and treatment. Eur J Sport Sci. 2013;13(5):499–508. |  |
| 13 | Apr 1  Apr 3 | Group presentations (Dr. J McKendry will join us) |  |  |
| 14 | Apr 8 | Activity Day #4 |  | Infographic & policy brief |