

KINESIOLOGY AND HEALTH SCIENCES

COURSE OUTLINE – Winter 2026

**PE 2420 (A3) - Introduction to Nutrition for Exercise and Performance 3 (3-0-0) UT
45 Hours for 15 Weeks**

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR: Brendan Shaffick

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OFFICE HOURS: By Appointment

CALENDAR DESCRIPTION: The course examines the fundamental principles of nutrition and the effects it has in society, athletic performance and physical education. It includes an analysis of practical and theoretical concepts of nutrition and the effects that dietary intake has on exercise, body composition and athletic performance.

PREREQUISITE/COREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS:

Sizer, F., Whitney, E., D'Andreamatteo, C., Novak, E., and Piche, L. (2024).

Nutrition: Concepts and Controversies. 6th edition. Cengage.

DELIVERY MODE: In person

LEARNING OUTCOMES:

During this course, students will:

1. Develop a basic knowledge of the functions of the major nutrients.
2. Work to clarify basic interactions between dietary intake, exercise, and body composition.
3. Critically evaluate claims about nutrition and food products.
4. Explore the role of nutrition in exercise and athletic performance.
5. Develop a working knowledge of key concepts such as Dietary Reference Intakes and calculating such concepts as the Total Daily Energy Expenditure.
6. Demonstrate competency in tracking and analyzing nutritional practices for the purposes of critical reflection.
7. Critically analyze their own and others nutritional practices and increase competence to make recommendations.
8. Differentiate between scientifically supported claims and other claims in the nutritional field.
9. Introduce and explore exercise training principles, basic sport nutrition guidelines, methods of energy expression, energy systems, and the relationship with nutrition practices.

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Research Analysis Quiz	10%	Week 3
Food Diary & Analysis #1	10%	Week 4
Case Study Analysis Quiz	10%	Week 6
Food Diary & Analysis #2	10%	Week 8
Midterm Exam	20%	Week 10
Applied Nutritional Planning Quiz	10%	Week 13
Final Exam	30%	TBA

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100	C+	2.3	67-69
A	4.0	85-94	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Lecture: Tuesday & Thursday – 2:30-3:50 (J202)

Wks	Dates	Lecture 1	Lecture 2
1	Jan 06/08	Introduction to Nutrition	Epistemology & The Scientific Method
2	Jan 13/15	Measuring Energy/ Food Guides & Labels	Measuring Energy/ Food Guides & Labels
3	Jan 20/22	Contemporary Issues & Debates	Research Analysis
4	Jan 27/29	The Human Body & Digestion	The Human Body & Digestion
5	Feb 03/05	Fluid and Electrolyte Balance	Physiological Markers of Nutrition
6	Feb 10/12	Contemporary Issues & Debates	Case Study Analysis
7	Feb 17/19	No Classes: Winter Break	
8	Feb 24/26	Energy Metabolism	Carbohydrates
9	Mar 03/05	Proteins	Lipids
10	Mar 10/12	Contemporary Issues & Debates	Applied Nutrition Planning
11	Mar 17/19	Performance Nutrition & Supplementation	Major Minerals
12	Mar 24/26	Trace Minerals	Nutrition Myths, Eating Disorders, & Diet Culture
13	Mar 31/Apr 2	Capstone Assignment	
14	Apr 07/09	Review - Final Exam	Review - Final Exam
15		Final Exams	

STUDENT RESPONSIBILITIES:

1. Participation and Engagement:

Active participation is key in this experiential course. It's essential to attend and be engaged in all scheduled sessions, see Attendance and Exceptions below.

2. Assignment Submissions

Some assignments will require you to submit a video or audio recording of your work. These assignments are designed to assess your practical understanding and application of the course material. When submitting a video ensure that your video clearly demonstrates the required skills or concepts outlined in the assignment instructions. The video should be well-lit, with clear audio and visuals, so your assignment is easily understood.

3. Attendance Protocols:

Attendance is noted during each session. Those present but inactive may be given in-class tasks to ensure they remain engaged. Students arriving up to 15 minutes late should discreetly join the session and may be asked to complete a brief catch-up task after class. If over 15 minutes late, students may be marked as absent or asked to leave, given the significant amount of content missed. If you anticipate being late, please try your best to inform the instructor in advance.

4. Attendance and Exceptions:

For medical-related absences or injuries, a note from a doctor or qualified medical professional may be required. If you sustain an injury and expect prolonged absences, please liaise with the instructor promptly. Students involved in intercollegiate events should preemptively consult with the instructor about possible scheduling conflicts. Alternate assignments might be offered to accommodate unforeseen situations. Please be aware that exceeding 10% (or 5 sessions) absence could render you ineligible for the final exam.

5. Late Policy:

Assignments are due by 12 midnight MST/MDT on the specified due date. Late assignments face a 5% daily deduction, to a maximum of 7 days. Missed exams, barring validated emergencies will result in a grade of zero. Approved alternative assignments will also be subject to the daily penalty.

6. Electronic Devices:

You're welcome to use electronic devices as long as they don't disrupt the learning environment. If they become a distraction, you may be asked to step out or adjust your usage. Remember, our primary goal is a focused and respectful classroom for everyone. If you have an essential call, please step outside discreetly.

7. Code of Conduct:

Let's keep our class environment positive and respectful. Kindly avoid using offensive, inappropriate language or being disruptive to the learning of others during class. As we navigate through this course, conduct yourself in a manner that reflects leadership and inspires others. Students violating this policy may be asked to leave the class.

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

****Note:** all Academic and Administrative policies are available on the same page.

ADDITIONAL INFORMATION:

Your success in this course is a priority. Please know that we are here to support your academic journey. If you encounter challenges or need clarification on any aspect of the course, do not hesitate to reach out. Together, we'll work towards your growth and achievement.