

KINESIOLOGY AND HEALTH SCIENCES

COURSE OUTLINE – Winter 2025

**PE2420 (A3&B3): Introduction to Nutrition for Exercise & 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: Karie Cassell

PHONE: 780-539-2441: Office at NWP
Tues/Thurs
780-814-2983 (cell T/Th 9-5
pm)

OFFICE: K220

E-MAIL: KCassell@nwpolytech.ca

OFFICE HOURS: Upon student request (Mainly Tues and Thurs between sessions: 12-1 pm or available by email and set up zoom sessions)

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(S)/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(S):

This course will be delivered via in-person classes with some online components.

LEARNING OUTCOMES:

After successful completion of this course, students should be able to:

1. Develop a basic knowledge of the functions of the major nutrients.
2. To clarify basic interactions between dietary intake, exercise, and body composition.
3. To critically evaluate claims about nutrition and food products.
4. Explore the role of nutrition in exercise and athletic performance.
5. To effectively 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. Work to critically analyze own and others nutritional practices and increase competence to make recommendations.
8. To differentiate between scientifically supported claims and other claims in the nutritional field.
9. To 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.alberta.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:

Assessment	% of final	A3 (Tues. & Thurs).	B3 (Tues. & Thurs.)
Project 1	10%	Feb 4, 2025	Feb 4, 2025
Project 2	30%	March 17, 2025	March 17, 2025
Quizzes (5)	10%	Assessed throughout the semester	

Midterm	20%	Feb 24, 2025	Feb 24, 2025
Final Exam	30%	TBD (April)	TBD (April)

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:

IN-CLASS LECTURE SCHEDULE			
Week	Date	Topic	Notes
1	Week of 6-Jan-2025	Introduction & Nutrition Basics Your Why/Vision	Classes Start Jan 7 th (Tues)
2	Week of 13-Jan-2025	Energy Systems Calories	
3	Week of 20-Jan-2025	Carbohydrates Fiber	
4	Week of 27-Jan-2025	Protein/ Amino Acids	
5	Week of 3-Feb-2025	Lipids/Fatty Acids	
6	Week of 10-Feb-2025	Vitamins & Minerals	
7	Week of 17-Feb-2025	No classes	No Classes Feb 17-20 th Family Day Week
8	Week of 24-Feb-2025	Hydration Electrolytes Alcohol	
9	Week of 3-Mar-2025	Physical Activity Nutrition & Weight Management	(pre/during and post workout nutrition)

10	Week of 10-Mar-2025	Life Cycle Disease Trends (Diabetes, Obesity, Heart Disease)	Additional topics-Vegetarian, Plant-based and Diet Trends)
11	Week of 17-Mar-2025	Label Reading, Protein Powders, nutrient deficiencies.	Project/Research/Group Work options
12	Week of 24-Mar-2025	Nutrition Tools Peak Performance i.e. carb loading	March 27 th —Mid-Term or project as above as not here for classes
13	Week of 31-Mar-2025	Eating Disorders & Disordered Eating Mental Health	Female Triad Syndrome signs, anxiety, panic attacks-the food connection
14	Week of 7-April -2025	Nutrition Tools Project on Products i.e. Pros and cons of sports drinks, caffeine, supplements etc. -Review	April 10 th no in-person/virtual class (make up class done earlier or available for 20 min individual appointments 1-7 pm for questions and review) Prep for exam/review

*Note: Some of these dates and topics may vary to facilitate student learning

*Readings to be posted

STUDENT RESPONSIBILITIES:

Refer to Northwestern Polytechnic policy on the Student Rights and Responsibilities on the NWP website.

All assignments are expected to be submitted on the due date. Late assignments will be deducted 10% per day up to 5 days late. After 5 days late, assignments will not be accepted and receive a grade of 0. Each day will consist of the 24-hour period following the due date, including weekdays and weekends. Valid reasons for submission of late assignments as well as absence from labs, tests, midterm exam need to be communicated to the instructor as soon as possible and are limited to:

- Medical emergencies (physician note may be required)
- Death in the immediate family (death certificate may be required)
- Other significant occurrences (some form of documentation may be required)

It is the student's responsibility to acquire any materials and content missed due to absence.



Lectures/Slides will be provided to students in a format of the instructors choosing. You may not always receive complete slides or there may be alterations to the ones posted. It is the student's job to ensure they are taking appropriate notes.

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.