# Queen's University School of Kinesiology and Health Studies



Course Name:	Course Instructor:	Contact Hours:
HLTH 331/3.0	Kristine Boileau	Lectures: 1 x 3 hrs / 12 weeks
Advanced Human Nutrition		
		Prerequisite: HLTH 230/3.0 or NURS 100/3.0 HLTH or KINE Plans level 2 or above.
		This course leads to: KNPE 449/3.0

### **Course Description:**

The aim of this course is to provide students with a framework for understanding human nutrition. Specifically, students will learn how manipulating various components of nutrition can impact human health and as well as mitigate declines in human health during disease and aging. Given the wealth of nutrition-related information in social media (Twitter/Facebook etc.), another key aspect of this course will be the development of skills required to identify scientifically supported health claims of products vs. 'hype' and 'myth'. A primary focus of the course aims of utilizing evidence-based nutritional interventions to optimize human health at various stages of life (e.g., aging, pregnancy).

## **Textbook &/or Courseware Package**

**Exclusion:** 

There is no textbook for this course.

### **Course Notes**

Course notes will be placed on onQ.

### Readings

Experimental research papers, reviews, position stands, and government recommendations will be provided throughout the course. However, all students are required to familiarize themselves with the Dietary Reference Intakes that can be found here https://www.canada.ca/en/health-canada/services/food-nutrition.html. You will need to know how to navigate this website for your first written assignment.

### **Learning Outcomes:**

- Identify the basic scientific principles underpinning human nutrition scientific principles underpinning human nutrition.
- Critically evaluate the literature to develop an evidence-based opinion on nutritional interventions to optimize health.
- Develop an understanding how different nutrients impact metabolic health.

#### Course Evaluation:

Assignment 1	15%
Midterm 1	20%
Midterm 2	20%
Assignment 2	15%
Final Exam	30%

Course Outline		
Introduction	Nutrition for frail and older adults	
Energy balance and food labelling	Game changers critique and veganism	

Carbohydrates and exercise	Nutrition for injury and illness
Omega-3 fatty acids and cardiovascular health	Nutraceuticals and mitochondria
Omega-3 fatty acids and skeletal muscle health	Appetite regulation/Protein nutrition
Cannabis use in athletes	Sustainable nutrition / Carbohydrates and Exercise