Queen's University
School of Kinesiology and Health Studies

Course Name: HLTH 331/3.0 Advanced Human Nutrition	**Course Instructor:** Dr. Chris McGlory	**Contact Hours:** Lectures: 1 x 3 hrs / 12 weeks
		Prerequisite: HLTH 230/3.0 or NURS 100/3.0 HLTH or KINE Plans level 2 or above.
		Exclusion: None

Course Description:

The aim of this course is to provide students with a framework for understanding advanced human nutrition. Specifically, students will learn how manipulating various components of nutrition can impact human health and athletic performance as well as mitigate declines in human health during disease. A primary focus of this course will be upon the basic biochemical principles that regulate tissue (*i.e.,* skeletal muscle) protein turnover and functionality. 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 significant proportion of the course will be driven by the student's own interests.

Textbook &/or Courseware Package

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
- Critically analyse an individual's diet and identify components that are both deficient and surplus.
- Describe how to enhance health and well-being with nutritional interventions.

Course Evaluation:

Midterm 1	20%
Written Assignment	25%
Midterm 2	20%
End of term exam	35%

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 |