York University
Faculty of Health
School of Kinesiology and Health Science

KAHS 4020 3.0 – Human Nutrition

Winter term – January 10th to April 10th, 2022

Course director:
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Department of Kinesiology and Health Science
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Course Description:
This course focuses on basic and applied concepts of nutrition and their relevance to human health and disease. It encompasses the study of food composition and the role of various nutrients in the regulation cell, tissue, and organ function, as well as the implications for the maintenance of a healthy organism throughout life span. It starts with the identification of major components of the digestive system and their functions in the process of breaking down food and absorbing nutrients. It includes the study of how carbohydrates, fats, and proteins are digested, absorbed, transported, and metabolized in various tissues and organs of the body. This is followed by the analysis of the role of vitamins and minerals in maintaining physiological function, the impact of deficient intake on health, and their recommended dietary intakes. Major aspects of alcohol metabolism and issues associated with its overconsumption are discussed. It concludes with the study of energy metabolism and weight control focusing on the manipulation of calorie content, nutrient composition of the diet, and exercise.

Learning objectives

The overall objective is to provide the students with a basic and integrative understanding of nutrition and health. The intent is that students acquire enough knowledge of nutrition so they can apply science-oriented diet principles on a day-to-day basis.

Specific objectives are that the students:

1. Identify the main components of the digestive system and understand their respective roles in digestion, absorption, transport and metabolism of nutrients;
2. Use evidence-based concepts of nutrition to choose what foods to consume and make educated dietary choices;
3. Integrate concepts of anatomy, physiology, biochemistry, and metabolism into nutrition to use food to provide the appropriate types and amounts of nutrients required for normal physiological function;
4. Apply the principles of nutrition to maintain normal health and prevent common diseases such as diabetes and cardiovascular disease;
5. Understand the importance of diet and exercise in the maintenance of a healthy body weight throughout life span.

Methodology:

Online lectures will be posted on Moodle/eClass and will cover the content listed below. Lectures will be supplemented with specific reading material that is pertinent and relevant to the topics covered in lectures.

Pre-requisite or Co-requisite:

HH/KINE 2031 3.0 Human Anatomy
HH/KINE 3011 3.0 Human Physiology I

Topics to be covered:

- Nutrition – general aspects and definitions
- Classes of nutrients
- Anatomic overview of the digestive system
- Role of main organs in digestion
- Role of accessory organs in digestion
- Digestion, absorption, and transport of carbohydrates, fats, and proteins
- Glycemic index and glycemic load
- Dietary fiber
- Vitamins (fat- and water-soluble)
- Minerals (major and trace minerals)
- Alcohol
- Energy metabolism, diet, and weight control

Dr. Andrea Josse will teach the *protein section of the course*.
*Dr. Josse will post on Moodle, ahead of time, the slides of the material she will cover in class.

Required course material:

- *Course Manual*: Contains all slides used during the lectures and provides the basis for the students to take notes.
- *Course Textbook*: Ceddia, RB. Human Nutrition - 2022.
  The textbook contains the material that will be covered during the course, as well as the content that will compose the exams. It provides detailed explanations of all slides used in lectures.

Chronogram of classes:

Winter term – Officially starts Monday January 10th, 2022.
Officially ends Monday April 10th, 2022.

No lectures will be posted during Reading Week: Feb 19th to 25th, 2022.

Section M lectures are scheduled Mon, Wed, and Fri from 10:30 am to 11:30 am.

Section N lectures are scheduled Mon, Wed, and Fri from 11:30 am to 12:30 pm.

In previous years classes were held on ACW 109. However, due to the Covid-19 situation all classes and exams will be offered online during the Winter 2022 term.

Evaluation:
All exams will be online. Type – Multiple choice – **Only the final exam is cumulative**
Midterm # 1 – 27.5% (Fri, February 2nd, 2022)
Midterm # 2 – 27.5% (Mon, March 7th, 2022)
Final Exam 3 – 45% (TBD)

Important:

If, for any reason (medical or other) students do not write a midterm, the weight of the missed exam will be automatically transferred to the final exam. It is strongly recommended that the students avoid as much as possible missing a midterm. Remember, the final exam is cumulative and could be worth anything from 45% for those who have not missed any of the midterms, to 72.5% or 100% for those who missing one or both midterms, respectively. If, for any reason (medical or other) students do not write the final exam, there will be one deferred exam. ***No need to provide documentation*** *(Dr.'s note) for eligibility to take the deferred final exam. The cumulative deferred final exam will be online only, and it will take place in May 2021 at a date and time to be determined by KINE secretary's office. The deferred exam will contain questions with the same degree of difficulty as the missed exam. If the deferred exam is missed, a grade of* ***0 (zero)*** *will be entered for the mark. Students taking a deferred final exam usually do not obtain good marks. Therefore, students are advised not to miss any of the regularly scheduled exams.*

All students are expected to familiarize themselves with the following information:

ACADEMIC HONESTY - York University's Senate Policy on Academic Honesty
"*Academic honesty requires that people do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such words as their own or through impersonation. Similarly, academic honesty requires that people do not cheat (attempt to gain an improper advantage in an academic evaluation), nor attempt to alter, suppress, falsify or fabricate any research data or results, official academic record, application or document*."

Suspected breaches of academic honesty will be investigated, and charges shall be laid if reasonable and probable grounds exist. A student who is charged with a breach of academic honesty shall be presumed innocent until, based upon clear and compelling evidence, a committee determines the student has violated the academic honesty standards of the university. A finding of academic misconduct will lead to the range of penalties described in the guidelines which accompany this policy. To obtain further detailed information on Academic Honesty go to: **http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/**

For detailed information regarding Academic Integrity for Students, go to:

http://www.yorku.ca/academicintegrity/students/index.htm

STUDENT CODE OF CONDUCT

Students are reminded that they should be polite, courteous and civil during their interactions with the course instructor, TA, and other students. No abuse, aggression, harassment, intimidation, threats or assault will be tolerated, be it verbal or otherwise. This includes direct interaction and/or indirect, for example comments on the Course Forum on Moodle, as well as soliciting or "pushing" the instructor or TA for a higher grade. For the complete Student Code of Conduct and more details, please access the following website:

http://www.yorku.ca/oscr/studentconduct.html