

**THE UNIVERSITY OF BRITISH COLUMBIA**  
**Food, Nutrition and Health**

**FNH 350 – FUNDAMENTALS OF NUTRITION**

**INSTRUCTOR:** Dr. Yvonne Lamers  
Food, Nutrition and Health (FNH) Program; Faculty of Land and Food Systems

**CONTACT:** Office hours: Fridays, 9AM-12PM (FNH 245, 2205 East Mall).  
E-mail: For confidential questions, you may write Dr Lamers via CONNECT (Mail).  
For questions related to course content, you are encouraged to post your questions on the online discussion board (CONNECT 'Discussions'). Teaching assistants will participate as they are available.

**TEACHING ASSISTANTS:**

Fernanda Mujica-Coopman, Graduate Student (Human Nutrition)  
Abeer Aljaadi, Graduate Student (Human Nutrition)  
TBA

**LECTURE TIME & LOCATION:**

Mon    Wed    Fri        8:00 – 8:50        MacMillan 166

**PREREQUISITES:**

You must have FNH 250 and one of BIOL 201 / BIOC 202 / BIOC 300 as pre-requisites.

**COURSE MATERIALS:**

- Outline course notes will be posted on CONNECT for you to review before each class and as option to easier follow the class. You are responsible for all materials covered in the class, whether it is included in the notes or not.
- **TEXTBOOK:** Gropper, S.S.; Smith, J.L.; and Groff, J.L. (2012). *Advanced Nutrition and Human Metabolism*. 6<sup>th</sup> Edition. Wadsworth Thomson Learning. This textbook is highly recommended. Copies of this text are placed on reserve in Woodward library, and are available for purchase in the UBC bookstore. The publisher committed to a special book price for this course and term.
- For additional readings, the textbook by Frayn, K.N. (2010): *Metabolic Regulation – A Human Perspective* (3<sup>rd</sup> Edition. Wiley) is highly recommended.
- Readings for course discussions will include journal articles. Web-links for access to the journal articles will be posted on CONNECT prior to the scheduled course discussions.

**CLICKER REQUIREMENT:**

All students in FNH 350 are required to have access to an iClicker that is registered to their name and Student ID. Please click on the “Register your clicker here” link on the course website in Connect to register your clicker, if you have not registered your clicker in Connect previously.

**COURSE CONTENT:**

This course will cover the macronutrients (carbohydrates, lipids, and protein), fiber, and alcohol. We will also address energy metabolism. We will discuss the structure and function of the macronutrients and fiber; the digestion, absorption and metabolism of macronutrients, fiber, and alcohol; and the metabolic and health implications of excessive and inadequate intake of macronutrients and energy.

**LEARNING OUTCOMES/COURSE OBJECTIVES:**

At the conclusion of this course students should be able to:

1. Describe key features of the structure of various classes of macronutrients and of fibre.
2. List the functions and food sources of each of the macronutrients and fibre.
3. Explain the processes of digestion and absorption for the macronutrients, fibre and alcohol.
4. Describe the ways in which the macronutrients are transported, stored and metabolized by the body, as well as the means by which waste products of their metabolism are disposed of.
5. Describe the methods used to determine the human requirements for protein and energy.
6. List the factors affecting the requirements for protein and energy, and explain how these factors influence the requirements.
7. Describe the metabolic effects of consuming either excessive or inadequate amounts of the macronutrients, fibre and energy.
8. Describe the effects of feeding and fasting on metabolism.

**CLASS FORMAT:**

Classes consist of lectures and discussions. You are encouraged to review the course notes before the class. If you wish, you may print the course notes. The course notes will be an outline of the slides used in the lecture and will be posted on CONNECT.

Class participation is encouraged. If you wish to do well in this course, it is important to attend all the lectures. If you miss a lecture, it is YOUR responsibility to get the notes from another student in the class.

**EVALUATION:**

Midterm exam (Friday, October 21, 2016)	20%
Final exam (TBA)	45%
Online Quizzes (in total 4; each worth 5%)	20%
Course Discussions (in-class activity 3%, online 9%)	12%
Class participation (assessed by Clicker)	3%

Format of the four quizzes (held on CONNECT) is multiple-choice and true/false.

Midterm and final examinations will cover materials posted on CONNECT as well as those presented and discussed in class. The midterm and final exam will be composed of multiple-choice, true/false, and short/long-answer questions.

Make-up exams (midterm or final) will only be given to students, according to the university policies, with a valid note of excuse signed by a physician. Normally, the student must take the make-up exam within one week of the missed exam.

**STUDENT RESPONSIBILITIES:**

1. Be prepared for class. Read the material in the course notes and in the related chapters of the textbook.
2. Attend class. If you are absent, it is your responsibility (not mine) to make copies of any handouts, etc.
3. ASK QUESTIONS if you don't understand something.
4. If you have a complaint about the course, PLEASE DISCUSS IT WITH ME. Constructive suggestions will be welcomed.
5. Please be on time for class and ensure that your cellphone is turned off. Also, please avoid leaving and returning to class unless it is essential – other students find this disruptive.

**ACADEMIC HONESTY**

Academic honesty is a core value of scholarship. Cheating and plagiarism (including both presenting the work of others as your own and self-plagiarism), are serious academic offences that are taken very seriously in the Faculty of Land and Food Systems. By registering for courses at UBC, students have initiated a contract with the University that they will abide by the rules of the institution. It is the student's responsibility to inform themselves of the University regulations. Definitions of Academic Misconduct can be found on the following website: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959#10894>

**INFORMATION FOR STUDENTS IN THE DIETETICS MAJOR**

This course, like all required courses in the Dietetics Major, contributes to coverage of the *Integrated Competencies for Dietetic Education and Practice (ICDEP)*. All students in the Dietetics Major should refer to the Mapping of Curriculum to ICDEP page on the dietetics website to familiarize themselves with the requirements (<http://dietetics.landfood.ubc.ca/about/mapping-of-curriculum-to-icdep/>).