Course Description
This course will examine the role of macronutrients in functional biochemical processes as they relate to health and disease, over the life course. We will study the biochemical metabolism of macronutrients including carbohydrates, fat and protein and their metabolic regulation. The course will review contemporary research papers as they relate to disease and disease processes.

Days and times:
Mon - 8.30-9.20am
Wed - 8.30-9.20am
Fri - 10.30-11.20am

Special Dates:
Classes: Jan 06- April 07
Reading wk: w/o Feb 14

Class location:
JHE 376

Course Website:
Avenue to Learn

Instructors:
Dr Deborah Sloboda
HSC4H30A
sloboda@mcmaster.ca
extension 22250

Dr Jonathan Schertzer
HSC4H30D
schertze@mcmaster.ca
extension 22254

Dr Greg Steinberg
HSC4N63
gsteinberg@mcmaster.ca
extension 21691

Your instructors have a background in physiology and metabolism. They are available for questions before and after class. They are happy to meet with you but your experienced TA’s are your first point of contact.

Teaching Assistants:
Joseph Cavallari (HEAD TA): cavallj@mcmaster.ca
Michael Tsoulis: tsoulim@mcmaster.ca
Brandyn Henriksbo: henrikbd@mcmaster.ca
Christina Petlura: petlurc@mcmaster.ca
Mark Fuller: fullerm@mcmaster.ca
Textbook

There is no mandatory textbook for this course. However, some of the lectures will reference chapters from *Advanced Nutrition and Human Metabolism, 6th edition, by Gropper, Smith and Groff*. A few copies of the 5th Edition of the text book are in the “Reserve Room” in the Health Sciences Library. Supplemental reading may also be found online on Avenue to Learn.

Course Objectives

By the end of this course students will be able to:

- Demonstrate an understanding of developmental programming as it relates to metabolic disease risk
- Describe and analyze key nutrient-metabolic pathways as they relate to disease risk
- Demonstrate analytical skills in interpreting published scientific literature related to metabolism and disease risk

Course Evaluation

**Midterm (in class)**  30%  Written in class split between Fri Feb 28 and Mon Mar 3

**Assignments (3x10%)**  30%  Due in class on Jan 31, Mar 12, & April 4

**Final exam - cumulative**  40%  Two hour final exam during final exam period in April

Important

To avoid the necessity of a formal appeal for reassessment of final grades, you must ensure that any concerns you may have regarding your mark are brought to the attention of your TA[s] within **ONE WEEK** of the return of the paper/assignment/other course requirement in class.

Late Penalties

The late penalty for submitted work is **10%** per day (including Saturday and Sunday!). No work will be accepted after 3 days.
Teaching and learning strategies

Students learn better and remember more when they are actively involved in their learning. **PARTIAL lecture notes** will be posted online on Avenue to Learn after the lecture. Please do not inquire about the lecture notes in class. These notes are meant to serve as a review and are **not** intended to replace the lecture. Not all information needed for the assignments and exams will be found in the lecture notes, thus class attendance is **essential**.

Embedded in this course are 6 Journal club classes. These classes are active discussion classes, where TAs will present a relevant, recently published research paper to the class (approx 20min) followed by a discussion of the paper where relevance to the lectures will be discussed. Please note that Journal Club presentations and discussion are part of the course content and thus will be included on Midterms and/or Final exams. Also please note that **NO Journal Club class notes will be distributed**.

Policies

**Missed Work**

If you are absent from the University for a minor medical reason, lasting fewer than 5 days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form ([http://www.science.mcmaster.ca/associatedean/](http://www.science.mcmaster.ca/associatedean/)). When using the MSAF, report your absence to immediately (normally within 2 working days) to your instructor by email at sloboda@mcmaster.ca to learn what relief may be granted for the work you have missed, and relevant details such as revised deadlines, or time and location of a make-up exam. Absences for a longer duration or for other reasons must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted.

Please note that the MSAF **may not be used** for term work worth 30% or more, nor can it be used for the final examination.

**Academic Integrity**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the University.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy located at [http://www.mcmaster.ca/](http://www.mcmaster.ca/) academic integrity.

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.