**Days & Times**
Lectures on:
Tuesday, Wednesday, Friday
12:30-1:20 p.m.

Term 1: Sept 5-Dec 4
Mid-term recess: Oct 31-Nov 2
Thanksgiving: October 14

**Class Location**
ITB AB102

**Course Website**
Avenue to Learn

**Instructor Contact Info**
Dr. Michelle MacDonald
Office
HSC 4H45
Phone
905.525.9140 x22316
Email
macdonm1@mcmaster.ca

**Preference**
I receive numerous emails each day and will do my best to respond to all in a timely manner. So, please do not hesitate to contact me by phone at any time! We can then set an appointment to meet at a mutually convenient time.

**Course Inquiries**
Please direct all general course-related inquiries to the instructor during class. Many other students probably have the same questions! I save time for questions and answers at the beginning and end of each class. Don’t be shy! I want to get to know you!

I also arrive to class early and stay late after class has ended for anyone who would like to meet in person.

**Teaching Assistants**
You can also direct any and all questions related to the course to your TA that has been assigned to you (see page 2).

**Course Information**

**About the Course**

**Course Overview**
An introduction to key principles in intermediary metabolism. The course will cover principles of bioenergetics, major pathways for carbohydrates, proteins and lipids in energy production, nitrogen metabolism, biosynthesis of small molecules, photosynthesis, as well as the integration and regulation of metabolic activities.

**Teaching and Learning Strategies**
Students learn better and remember more when they are actively involved in their learning. Lecture notes will be posted after each lecture on Avenue to Learn, but you are encouraged to become involved in in-class activities to help support and reinforce your learning.

Please feel free to contact me if you have any questions, require further support or have concerns about the course, and I will do my best to address these in a timely manner to ensure the smoothest possible delivery of this course.

My background is in the area of human muscle biochemistry and metabolism, looking at how the body uses different fuels at rest and during exercise. I presently have research interests in how students best learn Biochemistry.

I hope to help you learn and share my interest and enthusiasm for human nutrition and metabolism!

**Main concepts and pathways that will be studied in this course:**
- ATP homeostasis
- PCR buffering
- Glycogen degradation
- Glycolysis
- TCA cycle
- Electron transport chain
- Oxidative phosphorylation
- Glycogen synthesis
- Gluconeogenesis
- Beta-oxidation of fats
- Fat synthesis
- Protein metabolism
- Urea cycle

**Recommended Text**
Biochemistry by Garrett & Grisham. Everyone needs a good basic Biochemistry reference book.
Evaluation and Due Dates

Assessments:  
1. Continuous assessments (due weekly—minimum of 5 must be submitted)  
2. Journal club meetings (4 meetings)  
3. Journal club submissions (4 submissions)  
4. ‘Your Way Project’

Weighting:  
Continuous assessments: 20%  
Journal club meetings: 10%  
Journal club submissions: 40%  
‘Your Way Project’: 30%

Due Dates:  
Continuous assessments: Due every Monday by 9:00 am in Avenue Drop Box (beginning Monday, September 16)  
Journal club meetings: See meeting schedule posted on Avenue  
Journal club submissions: Due one week after the journal club meeting by 1:20 pm in Avenue  
‘Your Way Project’: Due Wednesday, December 4 by 1:20 pm in Avenue Drop Box

Avenue Drop Box  
Assessments/submissions/projects must be submitted to the Avenue Drop Box.

Important  
All work will be graded by your TA within one week of its submission. 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 the TA within one week of the return of the paper/project/other course requirement.

Late Penalties  
The late penalty for submitted work is 20% per day (including Saturday and Sunday). No work will be accepted after 2 days.

Teaching Assistants  
TA:  
Anna Korol  
Tamiza Nanji  
Dhruv Patel  
Daniel Venegas Pino  
Supriya Verma

Contact:  
korola3@mcmaster.ca  
nanjit@mcmaster.ca  
pateld39@mcmaster.ca  
danestvenegas@gmail.com  
vermas9@mcmaster.ca

Students with last name:  
ABAL-COUC  
DENG-KIRI  
KOSA-NEAL  
NEGM-SONG  
SONN-ZIKO

The TAs are a valuable resource! Be sure to contact them when you need help or clarification since they will be the ones marking your papers!

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. 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. When using the MSAF, report your absence to mackap@msaf@mcmaster.ca. You must then contact the instructor immediately (normally within 2 working days) by email at mackap@msaf@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. 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. Under most circumstances, a one-week extension will be granted with the MSAF.

Academic Integrity  
You are expected to exhibit honesty and use ethical behavior 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/academicintegrity.

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 another credit has been obtained.  
2. Improper collaboration in group work.  
3. Copying or using unauthorized aids in tests and examinations.