INSTRUCTOR:         Dr. Janet Pritchard  IWC 216       Email: pritcj@mcmaster.ca
INSTRUCTIONAL ASSISTANT:  Mr. Ryan Belowitz    GSB112       Email: LS2N03@mcmaster.ca

Course Description:
This course covers the basic principles of human nutrition, including the interaction between nutrients and physiological processes that impact health and disease risk.

PREREQUISITES: Registration in Level II or above of a Life Sciences program.
ANTIREQUISITE: KINESIOL 1F03

Required Texts & Materials:

This text is available in the Campus Bookstore. Each version is bundled with the newest version of the diet analysis plus, which you will need for an assignment in this course, and potentially other courses. This textbook may also be used in LIFESCI 4W03.

Additional reading materials and basic lecture notes will be posted on the course website through Avenue to Learn (http://avenue.mcmaster.ca) for students to download and bring to class.

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

1) Describe the overall importance of nutrition in maintaining health.
2) Explain the role of Canada’s Food Guide in helping Canadians making healthy food choices.
3) Describe the anatomical structure and function of the digestive system and how food is processed and absorbed.
4) Compare and contrast types of carbohydrates and their role in metabolism, health and physical fitness.
5) State the role that dietary lipids play in overall human health and disease.
6) Define the importance of protein in maintaining physiological structure and function of the body.
7) Identify the role that micronutrients (i.e., vitamins and minerals) play in harnessing the energy in dietary macronutrients (i.e., carbohydrates, protein, lipids) and maintaining overall health.
8) Critique current and past fad diets and practices in sports nutrition and identify the impact on health and athletic performance.

Format:
• There are 3 lectures per week
  o Mondays, 8:30-9:20am in TSH 120
  o Wednesdays, 8:30-9:20am in TSH 120
  o Fridays, 10:30-11:20am in TSH 120
• Tests are scheduled during class times as indicated on the course schedule. Any changes to this schedule will be posted on Avenue to Learn.

Schedule of Topics:
Please refer to schedule on page 5.
Evaluation:

1) Assignment 20%
2) Online quizzes, 5% each 15%
3) iClicker questions (in class) 5%
4) Midterm exam, in class, location TBA 25%
5) Final exam, as scheduled by the registrar 35%

Notes on Assessment:

1) Assignment: Please download the assignment guideline on Avenue to Learn.

2) Online quizzes: There are 3, 15 minute online quizzes throughout the semester. Access the quizzes through Avenue to Learn. You cannot use your MSAF for an online quiz. Quizzes are open from Monday-Friday during the weeks specified in the Schedule of Topics section. Quizzes close at 11:59pm on the last day (Friday).

3) iClicker questions: You can expect 5-10 iClicker questions each week. You will be able to answer these questions during lecture only. You are responsible for bringing your own iClicker to class, and if you forget your iClicker, you will not be able to make-up the marks lost. You will be evaluated based on participation with the following grading scheme:

   80-100% questions answered = 5%
   65-79% questions answered = 4%
   50-64% questions answered = 3%
   35-49% questions answered = 2%
   20-34% questions answered = 1%
   <20% questions answered = 0%

4) Midterm and final exam: The midterm exam (duration: 45 min) will occur during class according to the course schedule (below). The final exam will be scheduled during Final Exam Period. Exams may include multiple choice, short answer, labeling figures, definitions, and can include compare and contrast short answer questions. You are not able to submit an MSAF for the midterm or final exam.

MSAF, Absences & Missed Work:
If you are absent from the university for a minor medical reason, lasting up to 3 calendar days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form (MSAF). The only eligible MSAF evaluation is the Assignment. Absences for a longer duration or for other reasons must be reported to your Faculty office, with documentation, and relief from term work may not necessarily be granted.

Protocol for using MSAF in LIFESCI 2N03:
1) Fill out the MSAF form on MOSAIC (under Academics).
2) Send an email to Ryan Belowitz (LS2N03@mcmaster.ca) immediately after using the online tool to notify him of the submitted MSAF. Failure to do so may negate the opportunity for relief.
3) If you submit an MSAF for the Assignment, the assignment must be submitted within 48 hours of the original deadline. Late assignments will be deducted 10% per day late.

Checking Your Grades:
Office hours with the Teaching Assistants will be arranged following the midterm. Only then can you review your exam. If you have concerns or discrepancies, contact the Instructional Assistant, Ryan Belowitz (LS2N03@mcmaster.ca).

Re-mark Policy:
Requests for re-evaluation of exams must be made to Ryan Belowitz (LS2N03@mcmaster.ca) within 1 week of the posting of grades. Only exams that are fully written in non-erasable pens or are typewritten will be considered for remarking. All requests must be made in writing to Ryan Belowitz who will then consider a possibility of a re-mark in collaboration with Dr. Pritchard. Please be aware that an approval for a remark can result in an increase, decrease or no change to the original mark.
Communication between Students and Faculty:
The University’s official method of correspondence with students is through a valid McMaster University e-mail account. It is the student's responsibility to keep his/her @mcmaster.ca account active and check it on a regular basis. All emails from students must include your full name, student #, and course code (LIFESCI 2N03). An effort will be made to respond to all emails within 24-48 hours (excluding weekends).

Student Responsibilities:
To get the most out of the course, you must be prepared to:
- attend all sessions, make up all missed work, and provide documentation for authorized absences;
- interact frequently with faculty, students, TAs, and other support staff;
- plan and manage your own time;
- complete preparatory tasks (such as reading, writing assignments, and initial research) in advance of sessions;
- develop and use reflective learning skills (for example identifying learning objectives, planning and carrying out research tasks, acting on academic feedback);
- work as an effective, efficient, and responsive team member on group assignments;
- check the course Avenue site, and your McMaster and Avenue e-mail daily for updates; and,
- follow all university policies and guidelines, and in all ways be a responsible university member.

Senate Student Policies
Students can view full policies here (http://www.mcmaster.ca/policy/Students-AcademicStudies/).
Senate Policy Statements are also available from the Senate Secretariat Office, Room 104, and Gilmour Hall.

  Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and 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.
  The following illustrate only four of many forms of academic dishonesty:
  - plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained;
  - copying or using unauthorized aids in laboratory exercises
  - improper collaboration in group work; and
  - copying or using unauthorized aids in quizzes, tests and examinations

  All students are reminded of the importance of academic integrity, and the serious consequences of academic dishonesty.

  You acknowledge that your behavior in all aspects of this course should meet the standards of the McMaster University Student Code of Conduct. You understand that any inappropriate behavior directed against any of your colleagues, teaching assistants, or the instructional team will not be tolerated. Disruptive behavior during any session (e.g. lecture, seminar, lab, tutorial) such as talking, sleeping or non-class computing while an individual presents information, or constantly being late, will also not be tolerated. Abuse, ridicule, slander, inappropriate language, and discrimination towards instructors teaching staff, teaching assistants and other students will not be tolerated in any capacity. Shared spaces including e-spaces such as the Avenue to Learn course discussion board are to be considered inclusive and safe.

Section on Use of Turnitin.com
In this course, we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com so that it can be checked for academic dishonesty. To see the Turnitin.com Policy, please go to www.mcmaster.ca/academicintegrity).

Copyright Policy
In this course you will have access to material that is subject to copyright laws. This includes (but is not limited to) textbooks and all resources developed by the instructors such as lab manuals, demonstration videos, quizzes, assignments, tests, class notes and class slides. Under no circumstance are you allowed to share or redistribute this material in any printed or electronic form.
without the explicit written consent of the copyright holder. This includes posting any course material on Internet bulletin boards, course repositories, social networks, etc.

**Academic Accommodation of Students with Disabilities**
Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca. For further information, consult McMaster University’s Policy for Academic Accommodation of Students with Disabilities.

**Academic Accommodation for Religious, Indigenous and Spiritual Observances**
McMaster University (the University) strives to be welcoming and inclusive of all its members and respectful of their differences. Students, staff, and instructors come from a range of backgrounds, traditions and beliefs. The University recognizes that, on occasion, the timing of a student’s religious, Indigenous, or spiritual observances and that of their academic obligations may conflict. In such cases, the University will provide reasonable academic accommodation for students that is consistent with the Ontario Human Rights Code, through respectful, accessible, and fair processes. [http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-Observances.pdf](http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-Observances.pdf)

**The instructors and the university reserve the right to alter this outline if necessary.**
The instructors and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.
### Schedule of Topics and Dates:

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Reading</th>
<th>Evaluation</th>
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| Week 1 | Sept 7, 9    | • Introduction to the science of nutrition  
• Rationale for studying nutrition  
• Types of nutrients  
• Dietary reference intakes  
• Nutrition assessment  
• Review health literacy and sources of health information | Chapter 1 |                                      |
| Week 2 | Sept 12, 14, 16 | • Tools for planning a healthy diet  
• Reading food labels  
• Introduction to digestion and absorption | Chapter 2 & 3 |                                      |
| Week 3 | Sept 19, 21, 23 | • Carbohydrates | Chapter 4 |                                      |
| Week 4 | Sept 26, 28, 30 | • Lipids | Chapter 5 |                                      |
| Week 5 | Oct 3, 5, 7   | • Protein | Chapter 6 | Online quiz Oct 3-7, 11:59pm  
(Week 1-4 content) |
|       |               |                                      |           |                                      |
| Midterm recess Oct 10-16th |             |                                      |           |                                      |
| Week 6 | Oct 17, 19, 21 | • Metabolism and energy balance | Chapter 7 & 8 | Midterm exam Oct 21st @ 10:30am |
| Week 7 | Oct 24, 26, 28 | • Weight management | Chapter 9 |                                      |
| Week 8 | Oct 31, Nov 2, 4 | • Nutrients for energy metabolism | Chapter 10 |                                      |
| Week 9 | Nov 7, 9, 11  | • Water and hydration | Chapter 11 | Online quiz Nov 7-11, 11:59pm  
(Week 5-8 content) |
| Week 10 | Nov 14, 16, 18 | • Anti-oxidant nutrients | Chapter 12 |                                      |
| Week 11 | Nov 21, 23, 25 | • Nutrition through the lifespan | Chapter 17 | Assignment due Nov 25 @ 10:30am |
| Week 12 | Nov 28, 30, Dec 2 | • Nutrients for bone health | Chapter 13 | Online quiz Nov 28-Dec 2, 11:59pm  
(Week 9-11 content) |
| Week 13 | Dec 5, 7      | • Nutrients for athletes | Chapter 15 |                                      |