COURSE OUTLINE

LIFESCI 2N03- Human Nutrition for Life Science

Fall 2017

INSTRUCTOR: Dr. Janet Pritchard IWC 219B Email: pritcjm@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:

The custom course textbook is bundled with the newest version of a diet analysis software, which is needed for an assignment in this course. The custom textbook includes select chapters from Whitney, E. N., Rolfes, S. R., Hammond, G., & Piche, L. A. (2016) Understanding Nutrition (2nd Ed.). Toronto, Canada: Nelson Education Ltd.

Students can purchase the custom textbook, or used copies of the larger textbook. Prior versions of the Whitney textbook should be used at the discretion of the student.

Students can purchase the Diet and Wellness Plus software alone from the bookstore or online at the following website: https://www.nelsonbrain.com/shop/isbn/9781285856216?parent_category_rn=&top_category=&urlLangId=-1&errorViewName=ProductDisplayErrorView&categoryId=&urlRequestType=Base&partNumber=9781285856216

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

1) Explain the role of Canada’s Food Guide, the Dietary Reference Intakes other public health tools in planning a healthy diet.
2) Describe the anatomical structure and function of the digestive system and how food is processed and absorbed.
3) Compare and contrast types of carbohydrates and their role in metabolism and health.
4) State the role that dietary lipids play in overall human health and disease.
5) Define the importance of protein in maintaining physiological structure and function of the body.
6) Discuss the role that micronutrients play in maintaining overall health.
7) Discuss evidence-based nutrition recommendations for infants and older adults.
8) Explain the importance of hydration for overall health and physical fitness.
9) Critique evidence on fad diets and explain the impact of the diets on health outcomes.
10) Conduct a nutrient analysis on a diet and compose a written interpretation.

Format:
- There are 3 lectures per week: Mondays, Wednesdays and Thursdays 10:30-11:20am in ITB 137
**Schedule of Topics:** This schedule is subject to change at the discretion of the Professor.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Reading</th>
<th>Details</th>
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</table>
| 1    | Sept 6, 7   | • Health literacy and sources of health information  
• Nutrition assessment                                  | Chapter 1    |                                              |
| 2    | Sept 11, 13, 14 | • Food labels  
• Canada’s Food Guide  
• Dietary reference intakes (DRIs)                  | Resources on Avenue |                                              |
| 3    | Sept 18, 20, 21 | • Digestion and absorption                                        | Chapter 2    |                                              |
| 4    | Sept 25, 27, 28 | • Carbohydrates                                                     | Chapter 3    | Quiz #1 Sept 27-29, 11:59pm (Week 1-3 content) |
| 5    | Oct 2, 4, 5 | • Lipids                                                          | Chapter 4    |                                              |

**Happy Thanksgiving!**  
Midterm recess Oct 9-13th

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<tr>
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<tbody>
<tr>
<td>6</td>
<td>Oct 16, 18, 19</td>
<td>• Protein</td>
<td>Chapter 5</td>
<td>Midterm exam Oct 19th @10:30am (Week 1-5 content)</td>
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<tr>
<td>7</td>
<td>Oct 23, 25, 26</td>
<td>• Weight management</td>
<td>Chapter 6</td>
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<tr>
<td>8</td>
<td>Oct 30, Nov 1, 2</td>
<td>• Nutrients for energy metabolism</td>
<td>Chapter 7</td>
<td>Assignment due Nov 2nd @ 10:30am</td>
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<tr>
<td>9</td>
<td>Nov 6, 8, 9</td>
<td>• Water and electrolytes</td>
<td>Chapter 8</td>
<td>Quiz #2 Nov 8-10, 11:59pm (Week 6-8 content)</td>
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<tr>
<td>10</td>
<td>Nov 13, 15, 16</td>
<td>• Anti-oxidant nutrients</td>
<td>Chapter 9</td>
<td></td>
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<tr>
<td>11</td>
<td>Nov 20, 22, 23</td>
<td>• Nutrition for mental health</td>
<td>Resources on Avenue</td>
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<tr>
<td>12</td>
<td>Nov 27, 29, 30</td>
<td>• Nutrition for bone and muscle health</td>
<td>Resources on Avenue</td>
<td>Quiz #3 Nov 27-29, 11:59pm (Week 9-11 content)</td>
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<tr>
<td>13</td>
<td>Dec 4, 6</td>
<td>• Wrap-up and catch-up</td>
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**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) Cumulative final exam, as scheduled by the registrar 35%

**Notes on Assessment:**

1) Assignment: Please download the assignment guideline on Avenue to Learn. Late assignments will receive a 20% deduction per day after the deadline has passed.

1) 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 for 3 days during the weeks specified in the Schedule of Topics section. Quizzes open at 8:30am on the first day and close at 11:59pm on the last day.

2) This course will incorporate regular iClicker questions during class. Evaluation will be based on participation, not getting the question correct. Please register your iClicker using your MacID by the second week of class. It is your
responsibility to bring your iClicker to class and ensure that it is working properly. If you forget your iClicker or don’t have batteries for your iClicker, you will not be able to make-up the marks lost. Class absence notification in the format of MSAF or otherwise will not impact the iClicker evaluation, as there is a provision in the marking scheme for missed questions. Approximately 50 iClicker questions will be asked over the course of the term, with final assignment of marks determined using the following scheme:

90-100% of questions answered = 5%
80-89% of questions answered = 4%
65-79% of questions answered = 3%
50-64% of questions answered = 2%
35-49% of questions answered = 1%
<35% of questions answered = 0%

If you have questions about using iClickers, please check out the Bookstore FAQ page: https://campusstore.mcmaster.ca/information/faq/iclicker-faq.html

To register your remote, please visit this website: https://www1.iclicker.com/register-a-remote

4) Midterm and final exam: The midterm exam (duration: 45 min) will occur during class according to the course schedule. There may be an alternate classroom for the midterm exam. Your Professor will notify you of the location during class and on Avenue. The final cumulative exam will be scheduled during the 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:
2) Fill out the MSAF form on MÓSAIC (under Academics).
3) 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.
4) If you submit an MSAF for the Assignment, the assignment must be submitted by November 4th at 10:30am. Use the MSAF submission folder on Avenue to submit your assignment.
5) Late assignments will receive a 20% deduction per day after the deadline has passed.

Checking Your Grades:
Office hours with the Professor or Teaching Assistants will be arranged following the midterm. Only then can you review your exam.

Re-mark Policy:
Requests for re-evaluation of exams must be made in writing via email to Dr. Pritchard within 1 week of exam viewing. Students must clearly indicate the rationale for re-marking the exam. All requests may not be granted. Please be aware that an approval for a remark can result in an increase, decrease or no change to the original mark. Only exams that are fully written in non-erasable pens or are typewritten will be considered for remarking.

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.

Student Responsibilities:
To get the most out of the course, you must be prepared to:
• adhere to student policies and the code of conduct, which includes posting online materials and online interactions with the Professor and peers;
• 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 Integrity - http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf
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.  

**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.