

## Health Science 3BB3

### Human Biochemistry II (Nutrition) - Fall 2021

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#### Course Description

This course builds on previous scientific understanding by exploring nutritional principles, and examining how food and lifestyle choices help shape health status, disease processes, and the responses to health challenges that clients face. Major content areas will include:

- Basic nutrient groups and their metabolism
- Nutrition at different life stages
- Contribution of exercise to health
- Clinical nutrition

While this course will explore nutrition from a scientific perspective, the contribution of cultural, ethnic, age, gender and psychosocial factors on lifestyle choices will also be examined. These more holistic perspectives allow for personalized care approaches that recognize the unique aspects of personhood and how they contribute to health and healing.

#### Course Objectives

Human Biochemistry II: Nutrition and Metabolism is a Level 3 Health Sciences course offered to students registered in the BScN program.

This course provides students with the opportunity to explore their personal lifestyle and its relationship to health status, as well as the rich scientific research that can inform their clinical reasoning with clients. Beginning with self and then looking out to others in a professional context of care allows students to appreciate that lifestyle choices indeed affect us all. Through lectures, classroom exercises, and tutorials, students will achieve greater personal knowing and see how science can have an impact on both their understanding of themselves as human beings, and beginning professionals, as well as seeing the broader influence of scientific understanding on how the lives of their clients might be impacted by better lifestyle choices. Scientific understanding allows the students to begin to define their professional role in terms of coaching related to lifestyle management as well as therapeutic interventions related to nutrition.

#### Overview of Approach to Teaching and Learning

##### Learning Outcomes

Upon completion of this course, students will be able to:

- Describe the relationship between lifestyle choices and health status, as well as nutrient classes and metabolic processes

- Employ critical appraisal skills to evaluate nutritional claims
- Apply basic nutrition principles to make dietary choices
- Appreciate the importance of exercise for the maintenance or improvement of health and quality of life
- Recognize the difference between energy density and nutrient density
- Realize that it is the whole diet and not just individual foods, over the long term, that will affect health
- Discuss nutritional requirements at different life stages
- Describe the effects of culture, ethnicity, age, gender and socio-economic factors on dietary choices

### **Learning Activities**

The instructor reserves the right to modify elements of the course and will notify students accordingly either in class or on Avenue to Learn (McMaster Undergraduate Course Management Policy, 2018).

#### **A. Online Lecture Captures on A2L**

2 hours per week. The lecture component of HTH SCI 3BB3 is divided into 5 lecture series, namely:

- Core Concepts in Nutrition
- The Macronutrients
- The Micronutrients
- Clinical Nutrition
- Nutrition at Different Life Stages & Special Topics

Lectures will be pre-recorded for you to watch at your own pace. Please refer to the site-specific lecture schedules on A2L for more information regarding dates and lecture topics. Virtual office hours will be available during registrar scheduled class hours.

#### **B. Virtual Tutorials**

There will be a 2-hour virtual tutorial every other week. For a week-by-week list of tutorial activities, please refer to the Tutorial Schedule & Activities tab on A2L.

Tutorials are an essential activity in this course. As such, attendance and participation in tutorial is mandatory. Tutorial performance will be assessed and graded by the Teaching Assistant (TA) assigned to each group.

## Evaluation Measures

**Please note: This course will use proctoring software** for tests/exams. This software will require you to turn on your video camera, present identification, monitor and record your computer activities, and lock down your browser during the exam. This software will be required to be installed before the exam begins. If you have questions about this software, or concerns about the use of this software, please contact your instructor.

### Midterm Exam (30%)

- Course material covered in lecture, and tutorial will be tested on the midterm exam.

### Tutorial Activities (25%)

- To enhance understanding of nutritional concepts and their relevance to clinical reasoning and judgement, students will engage in a number of tutorial exercises in order to integrate topics presented in lecture.
- For more detailed information regarding the tutorial exercises, please refer to the Tutorial Activities & Grading Guidelines located in the Tutorial Schedule and Activities tab on A2L.

### Final Exam (45%)

- The final exam for HTH SCI 3BB3 will be scheduled by the Registrar's Office during the fall semester examination period (December 9<sup>th</sup> – 22<sup>nd</sup>, 2021). The final exam is cumulative, and will cover material presented in lecture and tutorial.

### Missed Evaluations

Students that miss an evaluation measure (test or exam) for medical or compassionate reasons must inform their academic advisor as soon as possible and provide any necessary supportive documentation as requested. Once appropriate documentation has been submitted and accepted, alternate arrangements for missed tests will be made in consultation with the course instructor. Please see the 'HTHSCI 3BB3 Procedures for Deferred Midterm Exams' posted on Avenue.

Missed final examinations will be scheduled by the Registrar's Office as follows:

Fall semester deferred final examinations: February 22<sup>nd</sup> to February 25<sup>th</sup>, 2022

**Please note: Final grades are not official until released by the Office of the Registrar. There is no extra credit in HTHSCI 3BB3. Final grades will not be curved. Issues related to grades posted on A2L must be reported to the course instructor before the final exam is written.**

## Learning Resources

### Recommended Textbook

Smolin, L.A., Grosvenor, M.B., & Gurfinkel, D. (2020). *Nutrition: Science and Applications*, Third Canadian Edition: John Wiley & Sons (Canada).

Readings have been assigned for every week of lecture (please refer to the Readings Schedule on A2L). It is important that the readings are completed in advance of each lecture and its associated tutorial session.

This text is available for purchase at each site-specific bookstore.

### University and BScN Program Policies and Procedures

The University has defined its expectations of students in both the academic and non-academic life of the University community. Policies that govern these practices can be found on the Undergraduate Academic Calendar or on the University website <http://www.mcmaster.ca/policy>. As policies are reviewed and revised on a regular basis, students are responsible for checking the Policies, Procedures and Guidelines section of the University website for the most up-to-date information (adapted from the Undergraduate Calendar, 2020-21).

### Conduct Expectations

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the “Code”). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students’ access to these platforms.

### Copyright and Recording

Students are advised that lectures, demonstrations, performances, and any other course material **(including course outlines and manuals)** provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

## Extreme Circumstances

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email. The University has defined its expectations of students in both the academic and non-academic life of the University community. Policies that govern these practices can be found on the Undergraduate Academic Calendar or on the University website <http://www.mcmaster.ca/policy>. As policies are reviewed and revised on a regular basis, students are responsible for checking the Policies, Procedures and Guidelines section of the University website for the most up-to-date information (adapted from the Undergraduate Calendar, 2019-2020).

Students in the BScN program must also refer to program specific policies and procedures, which are found in the Undergraduate Nursing Education Program Handbook. This Handbook is located in A2L in the student resource section of the course. Ensure you are familiar with this document, including the following important policies:

- Attendance Expectations, Policies and Procedures
- Academic Accommodation of Students with Disabilities Policy
- Academic Integrity Policy
- Discrimination, Harassment & Sexual Harassment: Prevention & Response
- Faculty of Health Science Professional Behaviour Code of Conduct for Learners
- Code of Student Rights and Responsibilities
- Student Appeal Procedures
- McMaster University Grading Scale
- BScN Program Viewing Final Exams Policy
- Electronic Communication Policy
- Turnitin.com
- Request for Relief for Missed Academic Work (MSAF)

## Course Specific Policies and Procedures

Please refer to the following documents located in the course policies and procedures section of A2L for information regarding the policies and procedures governing all in course-related activities.

- Tutorial Absence Guidelines
- HTHSCI 3BB3 Procedures for Deferred Midterm Exams

### **Students with Academic Accommodations**

- Students registered with SAS (McMaster and Mohawk sites) or Accessibility Services (Conestoga site) are required to make an appointment with the course instructor within the first 3 weeks of classes to discuss their accommodation needs throughout the term.
- Accommodations, including the pre-booking of scheduled exams, must be initiated and organized by the student. If a student fails to make such arrangements, they will be required to follow the same process as all other students seeking relief from missed work or the writing of a deferred exam.