# **NFS489: NUTRITIONAL NEUROSCIENCE**

# **SYLLABUS**

## **GENERAL INFO**

Lecture Time: Monday, 9AM - 12PM
Credited Hours: 3 hours per week

Prerequisites: BCH210H1, BCH311H1/CSB349H1/PSL350H1, NFS284H1, PSL302Y1/(PSL300H1, PSL301H1)

Required Materials: No required textbook. Required scientific articles will be provided in electronic format.

Course Website: <a href="https://nutrisci.med.utoronto.ca/nutritional-sciences-undergraduate-courses">https://nutrisci.med.utoronto.ca/nutritional-sciences-undergraduate-courses</a>

#### YOUR PROFESSOR

## Chuck T. Chen, PhD

Office Location: Medical Science Building (MSB), Room 5347 - Sessional Lecturers Office

Office Hours: Wednesday 1-2pm (Starting on September 13 to November 29, 2023)

(If you like to meet at an alternative time, please email me to set an appointment)

Email: <u>tzuhuan.chen@utoronto.ca</u>

(I will try my best to reply within 48 hours. If you do not receive a reply, please resend your

questions and concerns. Thank you.)

## **GRADING + COURSE EXAMINATIONS**

University of Toronto Standard Grading Scale

(https://registrar.utoronto.ca/transcripts/transcript-grading-scales-notations/)

| A+ | 90-100% | Α | 85-89% | A- | 80-84% |
|----|---------|---|--------|----|--------|
| B+ | 77-79%  | В | 73-76% | B- | 70-72% |
| C+ | 67-69%  | С | 63-66% | C- | 60-62% |
| D+ | 57-59%  | D | 53-56% | D- | 50-52% |
| F  | 0-49%   |   |        |    |        |

All final grades with decimals will be rounded up to the next percentage point.

All assignment details will be provided on September 11, 2023, lecture by TA.

Attendance + Class Participation 10%
Mid-term Examination (October 16, 2023) 25%
Written Assignment (Due October 30, 2023) 15%
Student Presentations (November 20/27, 2023) 25%

Final Examination (December 4, 2023) 25% (Cumulative Exam)

#### EXPECTATIONS OF LATE WORK AND MISSING ATTENDANCE

Students are expected to attend the lecture and participate in class. If you are late or have unexcused missed attendance, you forfeit the all the possible points for attendance and class participation. Late assignments will be accepted without penalty if prior permission is granted by Dr. Chuck T. Chen. Unexcused late assignments will have automatic deductions of 10% of total assignment grade per day.

#### EXPECTATIONS OF MISSED EXAMS

In the event of missing the midterm exam due to illness, the allotted percentage for midterm exams will count towards the final exam. Please inform Dr. Chuck T. Chen by email. Then submit U of T Verification of Student Illness or Injury form (VOI) (https://sidneysmithcommons.artsci.utoronto.ca/i-cant-make-a-test-or-exam-what-do-i-do/).

In the event of missing the final exam due to illness, please inform Dr. Chuck T. Chen by email. Then submit U of T Verification of Student Illness or Injury form (VOI) (<a href="https://sidneysmithcommons.artsci.utoronto.ca/i-cant-make-a-test-or-exam-what-do-i-do/">https://sidneysmithcommons.artsci.utoronto.ca/i-cant-make-a-test-or-exam-what-do-i-do/</a>) in order to reschedule a make-up exam.

#### **ACCOMMODATION**

Any student who need academic accommodations for learning disabilities or functional limitation should contact Accessibility Services Office and provide a Letter of Academic Accommodation at a timely manner.

(https://www.studentlife.utoronto.ca/as/accommodation-letter)

## ACADEMIC INTEGRITY POLICY

The University of Toronto is committed to the values of independent inquiry and to the free and open exchange of ideas. Academic integrity underpins these values and is thus a core part of the University's commitment to intellectual life. Extending beyond our immediate intellectual community of students, faculty, and staff at the University of Toronto, our intellectual community embraces all who have contributed to the sum of human knowledge.

Honesty and fairness are fundamental values shared by students, staff and faculty in the University of Toronto community. The ethic of intellectual honesty goes hand in hand with the University's efforts to advance and disseminate knowledge by drawing fairly on the ideas of others, by presenting and testing ideas, and by giving and receiving appropriate recognition.

Please refer to the Code of Behaviour on Academic Matters for all Academic Offences. Violations will be enforced, reported and disciplined by the University of Toronto accordingly.

(http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf)

## ACADEMIC COURTESY + CLASSROOM RULES

- Phone calls and uninstructed conversations are strictly prohibited in the classroom. If you need to make a call or chat with your friends, then please step outside quietly to not disrupt the class.
- Please be punctual to class and if you are late, then enter quietly.
- Food is never permitted in the classroom while beverages are.
- Discussions will be a regular part of the course and all opinions are valid. You are encouraged to ask questions and to discuss the topic at-hand. Please refrain from detracting from the class lesson. If you have tangential questions, then please email me to discuss or set up a one-on-one meeting. Please show proper etiquette and respect to your fellow classmates. Any disrespectful comments or behaviours will NOT BE TOLERATED and will be a violation of the Code of Behaviour on Academic Matters.

## COURSE DESCRIPTION

This course is designed to give you an overview of nutritional neuroscience and how nutrition plays a vital role in the various functions of the brain. We will cover the current understanding how macronutrients, micronutrients, and antinutrients on various health and disease states. The lectures will help you navigate and critically assess scientific papers. This will aid you in the successful completion of your written and in-class presentations. We will cover fundamental concepts of scientific research and how they are applied in real world settings. Class participation will be through small group discussions throughout the lecture series.

### **COURSE OUTLINE**

| September 11 | Introduction and Assignments Overview - TA lecture   |  |  |  |
|--------------|--|--|--|--|
| September 18 | Basics to Nutritional Neuroscience                   |  |  |  |
| September 25 | Brain Lipid and Affective Disorder                   |  |  |  |
| October 2    | Proteins vs. Carbs: Satiety, Sleepy, and Obesity     |  |  |  |
| October 9    | Thanksgiving Holiday - NO CLASS                      |  |  |  |
| October 16   | In-class Midterm Exam                                |  |  |  |
| October 23   | Vitamins and Cognitive Decline                       |  |  |  |
| October 30   | Alcohol Use and Misuse (Written Assignment Due Date) |  |  |  |
| November 6   | Fall Reading Week - NO CLASS                         |  |  |  |
| November 13  | Food Preference, Food Choices, and Food Addiction    |  |  |  |
| November 20  | Student Presentation                                 |  |  |  |
| November 27  | Student Presentation and Course Review/Q&A           |  |  |  |
| December 4   | In-class Final Exam                                  |  |  |  |