



# **HHNS\*6040 Research Fronts in Nutritional and Nutraceutical Sciences**

Fall 2020  
Section(s): C01

Department of Human Health and Nutritional Sciences  
Credit Weight: 0.50  
Version 1.00 - September 08, 2020

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## **1 Course Details**

### **1.1 Calendar Description**

Building on an information base in nutrition, biochemistry and physiology, the course comprises selected research topics pertaining to the importance of nutrition as a determinant of health throughout the life span. Distinction will be drawn between the metabolic basis of nutrient essentiality and the health protectant effects of nutraceuticals.

### **1.2 Course Description**

This course builds on the basics of nutrition, biochemistry and physiology to explore selected research topics that explore aspects of nutrition as a determinant of health. Activities in the course focus on the concept of critical review, communication and reflection to establish a process of starting to master scientific literacy. This course is interactive and its value is maximized through active participation. This course will use ZOOM to enable a synchronous remote experience.

### **1.3 Timetable**

#### **Course Content**

Week 1-3 will use lecture, discussion and participation to explore the research, presentation, and writing skills that will be emphasized in the critical analysis approach to the course.

Weeks 4-8 will be individual student presentations, breakout groups, and class discussions. Each week will be dedicated to a current topic in nutritional and nutraceutical science research, and will be addressed by individual student research paper presentations. It is expected that students will read the papers that will be discussed to be able to contribute to the class discussions and get the most out of the classes.

Weeks 10-12 will be student group presentations and class discussions that will follow a teaching research seminar format.

### **Tentative Class Schedule**

<b>Week</b>	<b>Class Date</b>	<b>Class Activities</b>
1	Sept. 16	<ul style="list-style-type: none"> <li>-Introductions</li> <li>-Review course outline and course assignments</li> <li>-<u>Exploration of formulating a research question</u></li> <li>-Class interactive breakout groups discussions</li> </ul>
2	Sept. 23	<ul style="list-style-type: none"> <li>-<u>Exploration of writing a research critique</u></li> <li>-Class interactive breakout groups discussions</li> <li>-Sign up for individual and presentations</li> <li>-Sign up for group presentations.</li> </ul>

3	Sept. 30	- <u>Exploration of presenting a research critique</u> -Class interactive breakout groups discussions -Term paper topic check-in and discussions
4	Oct. 7	-Topic#1 Individual presentations -Class discussions
5	Oct. 14	-Topic#2 Individual presentations -Class discussions
6	Oct. 21	-Topic#3 Individual presentations -Class discussions
7	Oct. 28	-Topic#4 Individual presentations -Class discussions
8	Nov. 4	-Topic#5 Individual presentations -Class discussions
9	Nov. 11	Class focus to be determined (depends on timing of our progress and size of class)
10	Nov. 18	-Group presentations -Class discussions
11	Nov. 25	-Group presentations -Class discussions
12	Dec. 2	-Group presentations

		-Class discussions
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## 1.4 Final Exam

There is no final exam for this course.

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# 2 Instructional Support

## 2.1 Instructor

Alison M. Duncan, PhD, RD, FDC

Email: [amduncan@uoguelph.ca](mailto:amduncan@uoguelph.ca)

Office: virtual by ZOOM or phone call

Office Hours: A weekly ZOOM meeting time will be set to allow anyone to join if they have questions.

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# 3 Learning Resources

## 3.1 Required Resources

### Learning Resources (Other)

This course will use Courselink where materials for each class will be posted.

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## 4 Learning Outcomes

### 4.1 Course Learning Outcomes

By the end of this course, you should be able to:

#### 1. Learning Outcomes

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

1. Describe current topics in nutritional and nutraceutical science.
2. Critically evaluate the quality of published research studies.
3. Communicate effectively in academic writing, with an emphasis on critical analysis.
4. Communicate effectively in oral presentations and class discussions, with an emphasis on critical analysis.
5. Work effectively with peers to meet learning outcomes through collaboration.

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## 5 Teaching and Learning Activities

### 5.1 Course Content

Week 1-3 will use lecture, discussion and participation to explore the research, presentation, and writing skills that will be emphasized in the critical analysis approach to the course.

Weeks 4-9 will be individual student presentations, breakout groups, and class discussions. Each week will be dedicated to a current topic in nutritional and nutraceutical science research, and will be addressed by approximately 4 individual student research paper presentations (depending on class size). It is expected that students will read the papers that will be discussed to be able to contribute to the class discussions and get the most out of the classes.

Weeks 10-12 will be student group presentations and class discussions that will follow a teaching research seminar format.

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## 6 Assessments

### 6.1 Marking Schemes & Distributions

#### Methods of Assessment

**Individual Presentation:** Each student will give one individual presentation that will be a critical review of one journal article in a class session that follows a journal club format. A detailed description of the individual presentation is provided on the course website.

**Scientific Critique Term Paper:** Each student (in a group of 2 that is the same group as the group presentation) will write one scientific critique term paper on a topic of choice. The paper will follow the format of a critical research review. A detailed description of the scientific critique term paper is provided on the course website.

**Group Presentation:** Each student will give one group presentation (in a group of 2 students that is the same group as the term paper). The group presentation will follow a teaching research seminar format that focuses on the background related to the term paper topic. A detailed description of the group presentation is provided on the course website.

### Course Assessment Summary

Form of Assessment	Weight of Assessment	Due Date of Assessment	Course Content/Activity	Learning Outcome(s) Addressed
Individual Presentation	30%	Individual-specific	Individual presentation and discussion	1,2,4,5
Group Presentation	30%	Group-specific	Group presentation and discussion	1,2,4,5
Scientific Critique Term Paper	40%	Fri. Dec. 4, 2020	Individual work	1,2,3,5

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## 7 Department of Human Health and Nutritional Sciences Statements

### 7.1 Academic Advisors

If you are concerned about any aspect of your academic program:

- Make an appointment with a program counsellor in your degree program. [B.Sc. Academic Advising](#) or [Program Counsellors](#)

### 7.2 Academic Support

If you are struggling to succeed academically:

- Learning Commons: There are numerous academic resources offered by the Learning Commons including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills. You can also set up individualized appointments with a learning specialist.  
<http://www.learningcommons.uoguelph.ca/>
- Science Commons: Located in the library, the Science Commons provides support for physics, mathematic/statistics, and chemistry. Details on their hours of operations can be found at: <http://www.lib.uoguelph.ca/get-assistance/studying/chemistry-physics-help> and <http://www.lib.uoguelph.ca/get-assistance/studying/math-stats-help>

### 7.3 Wellness

If you are struggling with personal or health issues:

- Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance.  
<https://www.uoguelph.ca/counselling/>
- Student Health Services is located on campus and is available to provide medical attention. <https://www.uoguelph.ca/studenthealthservices/clinic>
- For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops and one-on-one sessions related to stress management and high performance situations.  
<http://www.selfregulationskills.ca/>

### 7.4 Personal information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) <http://www.e-laws.gov.on.ca/index.html>. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes.

For more information regarding the Collection, Use and Disclosure of Personal Information policies please see the Undergraduate Calendar.  
(<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml>)

## 8 University Statements

### 8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

### 8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Graduate Calendar - Grounds for Academic Consideration

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions

<https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml>

### 8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Graduate Calendar - Registration Changes

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml>

Associate Diploma Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml>

### 8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

### 8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be

noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website  
<https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website  
<https://www.ridgetownc.com/services/accessibilityservices.cfm>

## 8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct  
<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Graduate Calendar - Academic Misconduct  
<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

## 8.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

## 8.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars

<https://www.uoguelph.ca/academics/calendars>

## **8.9 Disclaimer**

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

## **8.10 Illness**

The University will not normally require verification of illness (doctor's notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.

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