

HHNS*6010 Seminar in Human Health and Nutritional Sciences

Summer 2021 Section(s): C01

Department of Human Health and Nutritional Sciences Credit Weight: 0.50 Version 1.00 - April 29, 2021

1 Course Details

1.1 Calendar Description

Students will develop their scientific communication skills by translating a specific body of knowledge on a chosen topic into a seminar. The class will also explore scientific process-oriented concepts and issues such as effective scientific communication and dissemination of results.

Restrictions: Restricted to HHNS MSc course work and project students.

1.2 Course Description

This course will provide a forum for community and communication among M.Sc. Coursework students and will be led by the Coordinator of the M.Sc. Coursework program. This is a graduate level course designed to explore issues and concepts related to the process of science including its comprehension, interpretation and communication. Students will gain a deeper appreciation for the value of all levels of research through a detailed exploration of experimentation at the cell culture, animal and human levels. The ability to give and receive criticism in the scientific arena will be explored in a class session and practiced through an assignment. Research communication will be studied and students will develop an appreciation for process-oriented scientific issues such as the allocation of credit, the management of data and the publication process. Other skills will be developed such as scientific writing, oral presentations and exposure to statistics. Although students formally register for this course in the Summer semester, the class meets on a periodic basis throughout the year to allow it to serve as a community resource for the M.Sc. Coursework program. This course will use a synchronous remote delivery by Zoom.

1.3 Timetable

Course Content (Tentative Class Schedule, will be added to each semester):

| Meeting | Date | Class Focus |
|---------|--|--|
| 1 | Date: Thurs Sept 17, 2020 | Class Meeting |
| | Time: 4-5pm | Introductions, Coordination, Discussion |
| | Location: by Zoom confirmed | |
| 2 | Date: Thurs Oct 15, 2020 | Getting Started on Your Oral Presentation Skills |
| | Time: 11am-1230pm | The Learning Commons, Victoria Fritz |
| | Location: by Zoom confirmed | Getting Started on Your Research Skills |
| 3 | Date: Thurs Nov 12, 2020 | Communication of Research from a Journalist's Perspective |
| | Time: 3:30pm-5pm Location: by Zoom confirmed | Owen Roberts, Ph.D., Director of Research Communications, University of Guelph |
| 4 | Date: Tues Dec 1, 2020 | An Exploration of Cell Culture Experimentation |
| | Time: 10am-11am | Lecture and Discussion |
| | Location: by Zoom confirmed | Amber Hutchinson, PhD Candidate, HHNS |
| 5 | Date: Tuesday Jan. 26, 2021 | On Being a Scientist: A discussion of the responsible conduct of science using a case-study format |

| | Time: 11am-1pm | Lecture and Discussion (Alison will lead) | | |
|----|--------------------------------|---|--|--|
| | Location: by Zoom confirmed | | | |
| 6 | Date: Friday Feb. 26, 2021 | An Exploration of Human Experimentation | | |
| | Time: noon-2pm | Lecture and Discussion (Alison will lead) | | |
| | Location: by Zoom confirmed | | | |
| 7 | Date: Tues. Mar. 30 2021 | An Exploration of Animal Experimentation | | |
| | Time: 11am-1pm | Lecture and Discussion | | |
| | Location: by Zoom confirmed | Justine Tishinsky, Ph.D., Human Health and Nutritional Sciences | | |
| 8 | Date: Tues. May 4, 2021 | Giving and Receiving Criticism in the Scientific Process | | |
| | Time: noon-2pm | Lecture and Discussion | | |
| | Location: by Zoom confirmed | (Alison will lead) | | |
| 9 | Date: May-June 2021 by Zoom | Results Interpretation, Scientific Writing and Posters | | |
| | | The Learning Commons, University of Guelph | | |
| | Details TBD | Sarah Gibbons, Victoria Fritz | | |
| 10 | Date: June 2021 by Zoom | Statistics and Data Management | | |
| | Details TBD | Lecture and Discussion | | |

| | | (Alison will lead) |
|----|-------------------------|---|
| 11 | Date: June 2021 by Zoom | HHNS Career Seminar |
| | Details TBD | Guest Speakers will be HHNS M.Sc. Coursework Graduates |

1.4 Final Exam

There is no final exam for this course.

2 Instructional Support

2.1 Instructor: Alison Duncan

Alison M. Duncan, PhD, RD, FDC

Office: ANNU 347

Phone: 824-4120 ext. 53416 (email preferred)

Email: amduncan@uoguelph.ca

Office Hours: anytime by appointment on Zoom

3 Learning Resources

3.1 Course resources

The class will have a Courselink site that will have all of the class resources for each class session. It will also have recordings of all the class sessions. Emails will also go out to the class with materials for each class session with reference to the Courselink site.

4 Learning Outcomes

4.1 Course Learning Outcomes

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

- 1. Appreciate the issues involved in cell culture, animal and human experimentation.
- 2. Have an improved ability to interpret cell culture, animal and human studies.
- 3. Learn how to give and receive criticism in the context of advancing scientific knowledge.
- 4. Have an improved ability to communicate research.
- 5. Gain an appreciation for specific issues involved in the responsible and ethical conduct of science.
- 6. Have improved scientific writing skills.

5 Teaching and Learning Activities

5.1 Lectures and discussion

5.2 Assignments

Manuscript Review Assignment (worth 40%)

The purpose of this assignment is to practice your review feedback skills. To do this, you will participate in the peer-review process by providing a review of a scientific article of your choosing (please have it approved by the instructor). You will then proceed as if you have been sent this manuscript for review. To guide you in your review, we will discuss relevant concepts and approaches in a class session on giving and receiving criticism to be held in early May 2021.

Format Requirements: No page requirement. Include a cover page. Use subheadings and bullet points. Email in Word with the filename HHNS6010-Review-FirstnameLastname, and

include a PDF of the article. Due during the Summer 2021 semester, **either before July 5**, **2021 or August 4**, **2021**.

Multi-Level Research Assignment (worth 60%)

The purpose of this assignment is to appreciate the value of multi-level research in the overall understanding and progression of a selected topic. You will select a topic of your choice and explore its literature at the cell culture, animal and human experimentation levels. For this assignment, you will:

- Choose a topic of interest to you and have it approved by the instructor
- Find at least 5 articles from each level of research (cell culture, animal, human)
- Organize your paper into sections including: introduction, cell culture experimentation, animal experimentation, human experimentation, summary/conclusions
- Within each research level section, summarize the research that has been done. Then provide commentary on how this level of research contributes to the progression of this topic. Also include how this research approach is limited in its ability to advance knowledge on this topic. This commentary is the core of the assignment; put thought into the relative value of each level of research to advancing knowledge on this topic.
- In your summary section, integrate your comments and ideas, speak to the value of multi-level research; comment on the knowledge gained by the totality of the evidence for your selected topic.

Format Requirements: 10-15 pages plus references and cover page; double-spaced. Email in Word with the filename HHNS6010-MLRA-FirstnameLastname. Due during the Summer 2021 semester, **either before July 5, 2021 or August 4, 2021.**

6 Assessments

6.1 Marking Schemes & Distributions

Methods of Assessment

| Form of Assessment | Weight of Assessment | Due Date of Assessment | Course Content /Activity | Learning Outcome Addressed |
|---------------------------------------|-------------------------|---|--------------------------------|----------------------------------|
| Manuscript Review Assignment | | Either before July 5, 2021 or Aug 4, 2021 | Lecture, non- lecture | 1, 2, 4, 5, 6 |
| Multi-Level Research Assignment | 60% | Either before July 5, 2021 or Aug 4, 2021 | Lecture, non- lecture | 3, 4, 5, 6 |

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. <u>B.Sc.</u>
 <u>Academic Advising</u> or <u>Program Counsellors</u>

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/getassistance/studying/chemistry-physics-help and http://www.lib.uoguelph.ca/getassistance/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.