

# NUTR\*4900 Selected Topics in Human Nutrition Section 01 Nutrition during Pregnancy

**COURSE OUTLINE – WINTER 2023** 

## 1. CALENDAR DESCRIPTION

This course requires reading and discussion on selected areas in human nutrition and its application; formal class reports and term papers. Primarily for Applied Human Nutrition majors.

**Credit Weight:** 0.5 credits

**Course Hours:** 3-0 (36 lecture; 0 lab/seminar)

Pre-Requisite(s): FRHD\*3070, NUTR\*3090, NUTR\*4010

Co-Requisites(s): N/A

**Restriction(s):** Registration in BASc AHN major

# 2. COURSE DESCRIPTION

This course requires reading, critical appraisal and discussion of research in human nutrition. In this section, we will explore the effect of nutrition on health and wellness during pregnancy. Topics of discussion will include gestational weight gain, low energy intakes, fish intake, sugar intake and more!

#### 3. TIMETABLE

**Lecture:** Tuesdays and Thursdays, 10:00 am – 11:20 am

Location: MCKN 311
Final Exam: None ©

# 4. INSTRUCTIONAL SUPPORT

**Course Instructor:** Laura Forbes, PhD, RD (she/her)

Email: forbesl@uoguelph.ca
Telephone: 519-824-4120 ext. 52544

Office: MacDonald Institute (MINS) 227B

**Office Hours:** By Appointment. Please reach out if you have questions and I will happily meet either in-person or virtually a time that works for both our schedules.

#### 5. LEARNING RESOURCES

## **Required Resource(s):**

Class readings will be posted on Courselink. See course schedule for listings of weekly readings.

## **Recommended Resource(s):**

# **Citation Manager**

It is recommended you learn to use a citation manager to manage references for your term paper. It allows you to collect references from a wide variety of electronic resources (e.g., PubMed) to create your own personal reference database. If you use Microsoft Word, your collected references can be seamlessly integrated into your term paper following any known standard format for the text of the paper and the reference list. <a href="https://guides.lib.uoguelph.ca/c.php?g=137782&p=900773">https://guides.lib.uoguelph.ca/c.php?g=137782&p=900773</a>

# Statistics Help

- You can consult a statistician to help with interpretation of data analysis
- The Data Resource Centre in McLaughlin library can help. Here's how:
  - Go to the UG Library website
  - Click Book Online Appointments, select Working with Data
  - State in the message you are enrolled in NUTR\*4900
  - Once the form is submitted, the DRC staff will forward the message accordingly. Within 24 hours, you can expect a response regarding setting up a consultation.

#### **Communicating**

- a. **Paraphrasing others' ideas and work** Knowing how to summarize or adapt others' work for different purposes is a key skill needed in applied nutrition. Visit the Library's Writing Resources page for help with citing and paraphrasing: <a href="https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops/academic-writing-resources-templates">https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops/academic-writing-resources-templates</a>
- b. **Referencing Style** Nutrition journals use many different styles for referencing for this course pick either APA (name, year) OR CS (citation-sequence) and use it correctly. <a href="https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops/citation-bibliography-resources-style-guides">https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops/citation-bibliography-resources-style-guides</a>

## 6. LEARNING OUTCOMES

At the completion of the course, successful students will be able to:

1. To develop competency in the description and critical appraisal of journal articles in selected applied nutrition topic areas.

- **2.** Effectively communicate in writing and orally critical appraisals of research and research articles.
- **3.** To gain proficiency in facilitating and participating in informed discussion about research.

# 7. TEACHING AND LEARNING ACTIVITIES

Week	Date	Topics	Assigned Readings	Notes & Due Dates
	Jan 10 <sup>th</sup>	Course Overview		
1	Jan 12 <sup>th</sup>	Review of research methods	There are several readings, but they will set you up for success this semester!  1. Handout "Critiquing a Journal Article"  2. Siemieniuk & Guyatt. What is GRADE?  BMJ Best Practice.	DUE today in class: Tell me who your article critique partner is
	Jan 17 <sup>th</sup>	Interpreting statistical results (aka stats bootcamp!)	Synchronous Zoom presentation (joint session with Dr. Lo's section of Nutr. 4900. You will be sent a Zoom link prior to this class)	
2	Jan 19 <sup>th</sup>	Critiquing a journal article PART 1	Callaway LK, McIntyre HD, Barrett HL, Foxcroft K, Tremellen A, Lingwood BE, Tobin JM, Wilkinson S, Kothari A, et al. Probiotics for the Prevention of Gestational Diabetes Mellitus in Overweight and Obese Women: Findings From the SPRING Double-Blind Randomized Controlled Trial. Diabetes Care. 2019 Mar;42(3):364-371. doi: 10.2337/dc18-2248. Epub 2019 Jan 18.	
3	Jan 24 <sup>th</sup>	How to search the literature	Guest Speaker: Nancy Birch	
	Jan 26 <sup>th</sup>	Critiquing a journal article PART 2	Wang H, Huang L, Lin L, Chen X, Zhong C, Li Q, Li N, Gao D, Zhou X, et al. The overall plant-based diet index during pregnancy and risk of gestational diabetes mellitus: a prospective cohort study in China. Br J Nutr. 2021 Nov 28;126(10):1519-1528. doi: 10.1017/S0007114521000234. Epub 2021 Jan 20.	

Week	Date	Topics	Assigned Readings	Notes & Due Dates
4	Jan 31st  Article critique: Student presentations  Are bodd, Rando Weigh Health Lifesty, Rando 2;11(1)		Presenters 1 Dzakpasu S, Fahey J, Kirby RS, Tough SC, Chalmers B, Heaman MI, Bartholomew S, Biringer A, Darling EK, et al. Contribution of prepregnancy body mass index and gestational weight gain to adverse neonatal outcomes: population attributable fractions for Canada. BMC Pregnancy Childbirth. 2015 Feb;15:21 Discussants 1 Presenters 2 Dodd, JM, Deussen, AR, Louise, J. A Randomised Trial to Optimise Gestational Weight Gain and Improve Maternal and Infant Health Outcomes through Antenatal Dietary, Lifestyle and Exercise Advice: The OPTIMISE Randomised Trial. Nutrients. 2019 Dec 2;11(12):2911. doi: 10.3390/nu11122911. Discussants 2	
	Feb 2 <sup>nd</sup> Article critique: Student presentations		Presenters 1 Bleker LS, de Rooij SR, Painter RC, van der Velde N, Roseboom TJ Prenatal Undernutrition and Physical Function and Frailty at the Age of 68 Years: The Dutch Famine Birth Cohort Study. J Gerontol A Biol Sci Med Sci. 2016 Oct;71(10):1306-14.  Discussants 1  Presenters 2  Ramírez-López MT, Vázquez M, Bindila L, Lomazzo E, Hofmann C, Blanco RN, Alén F, Antón M, Decara J, Arco R, Ouro D, Orio L, Suárez J, Lutz B, Gómez de Heras R, Rodríguez de Fonseca F. Maternal Caloric Restriction Implemented during the Preconceptional and Pregnancy Period Alters Hypothalamic and Hippocampal Endocannabinoid Levels at Birth and Induces Overweight and Increased Adiposity at Adulthood in Male Rat Offspring. Front Behav Neurosci. 2016 Nov 1;10:208  Discussants 2	

Week	Date	Topics	Assigned Readings	Notes & Due Dates
	Feb 7 <sup>th</sup>	Article critique: Student presentations	Presenters 1  Murcia M, Ballester F, Enning AM, Iñiguez C, Valvi D, Basterrechea M, Rebagliato M, Vioque J, Maruri M, et al. Prenatal mercury exposure and birth outcomes. Environ Res. 2016 Nov;151:11- 20.  Discussants 1  Presenters 2  Taylor CM, Golding J, Emond AM. Blood mercury levels and fish consumption in pregnancy: Risks and benefits for birth outcomes in a prospective observational birth cohort. Int J Hyg Environ Health. 2016 08;219:513-20.  Discussants 2	DUE: Term paper topic approval. Submit to Dropbox by 11:59pm
5	Feb 9 <sup>th</sup>	Article critique: Student presentations + Q & A about written critical appraisal	Presenters 1 Donazar-Ezcurra M, Lopez-Del Burgo C, Martinez-Gonzalez MA, Basterra-Gortari FJ, de Irala J, Bes-Rastrollo M. Soft drink consumption and gestational diabetes risk in the SUN project. Clin Nutr. 2017 Feb. Discussants 1 Presenters 2 Graham JE, Mayan M, McCargar LJ, Bell RC, Team SM. Making compromises: a qualitative study of sugar consumption behaviors during pregnancy. J Nutr Educ Behav. 2013 2013 Nov- Dec;45:578-85. Discussants 2	I will have your topic approval back to you by class time today.
6	Feb 14 <sup>th</sup>	Writing a Literature Review	Guest Speaker from U of G Library Writing Services—synchronous Zoom presentation	

Week	Date	Topics	Assigned Readings	Notes &
			Presenters 1	Due Dates
			Gray-Donald K, Robinson E, Collier A, David K, Renaud L, Rodrigues S. Intervening to reduce	
			weight gain in pregnancy and gestational	
			diabetes mellitus in Cree communities: an	
			evaluation.	
			CMAJ. 2000 Nov 14;163(10):1247-51.	
		Article critique:	Discussants 1	
		Student presentations	Presenters 2	
	Feb 16 <sup>th</sup>	Stadent presentations	Oster RT, Bruno G, Mayan MJ, Toth EL, Bell RC;	
		+ Q & A about written	ENRICH, First Nations Community Advisory	
		critical appraisal	Committee. Peyakohewamak-Needs of Involved	
			Nehiyaw (Cree) Fathers Supporting Their	
			Partners During Pregnancy: Findings From the	
			ENRICH Study. Qual Health Res. 2018	
			Dec;28(14):2208-2219. doi:	
			10.1177/1049732318794205. Epub 2018 Aug 30.	
			PMID: 30160198	
			Discussants 2	
7	Feb 21 <sup>st</sup>	READING WEEK- No Cla		
,	Feb 23 <sup>rd</sup>	READING WEEK- NO Cla	55 🐷	
	Feb 28 <sup>th</sup>	Student seminars	1.	
		+ Q & A about written	2.	
		critical appraisal	-	
				<b>DUE:</b> Individual
8	Mar 2 <sup>nd</sup>	Student seminars		Critical
			1. 2.	Appraisal. Submit to
			2.	Dropbox by
				11:59pm
			1.	la
	Mar 7 <sup>th</sup>	Student seminars	2.	
9	+h	Student seminars	1.	
	Mar 9 <sup>th</sup>		2.	
	B. a. a. th	Chudout consissers	1.	
10	Mar 14 <sup>th</sup>	Student seminars	2.	
10	Mar 16 <sup>th</sup>	Student seminars	1.	
	INIQI TO	Student Seillildis	2.	

Week	Date	Topics	Assigned Readings	Notes & Due Dates
11	Mar 21 <sup>st</sup>	Student seminars	1. 2.	
	Mar 23 <sup>rd</sup>	Student seminars	1. 2. 3.	
12	Mar 28 <sup>th</sup>	Student seminars + Q & A re: term paper	1. 2. 3.	
	Mar 30 <sup>th</sup>	No Class – Time to work on term paper		
13	Apr 4 <sup>th</sup>	TBD- Keep this class open in case we need to reschedule due to illness, weather, etc.		
	Apr 6 <sup>th</sup>	TBD- Keep this class open in case we need to reschedule due to illness, weather, etc.		DUE: Term paper & self- reflection on engagement. Both due to Dropbox by April 10 <sup>th</sup> at 11:59pm

**Note:** This is a tentative schedule; however, due to various unknown factors there may be changes. Any changes will be announced during class and an announcement will be posted on the CourseLink site.

# **8. ASSESSMENT DETAILS**

Assessment	LOs Addressed	Due Date	% of Final
Oral Assignments			
Article critique (as a pair/group)	1, 2	Jan 24-Feb 16 <sup>th</sup>	15%
Discussant for an article critique (with same partner(s) as	2	Jan 24-Feb 16 <sup>th</sup>	5%
above)	3	Jan 24-red 10	3/0
Individual student seminar	1, 2	Feb 28 <sup>th</sup> - Mar 28 <sup>th</sup>	20%
Written Assignments			
Torm nanor tonic approval	1.2	Feb 7 <sup>th</sup> submit to Dropbox	5%
Term paper topic approval	1, 2	by 11:59 p.m.	
Individual critical appraisal	1.2	March 2 <sup>nd</sup> , submit to	15%
Individual critical appraisal	1, 2	Dropbox by 11:59 p.m.	

Assessment	LOs Addressed	Due Date	% of Final
Individual term paper	1, 2	April 10 <sup>th</sup> , submit to Dropbox by 11:59 p.m.	25%
Engagement			
Participation in class discussions and self-reflection on		Throughout; Self-reflection	
·	3	due on Apr 10 submit to	15%
engagement		Dropbox by 11:59	
		TOTAL:	100%

Please see Appendix to course outline for assignment details and rubrics.

#### 9. COURSE STATEMENTS

# Land Acknowledgement:

We acknowledge that the University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer our respect to our Anishinaabe, Haudenosaunee and Métis neighbours as we strive to strengthen our relationships with them. Acknowledging them reminds us of our important connection to this land where we learn and work.

#### Your Role in this Course:

I will do my best to keep each class interesting and challenging, however I believe that "you get what you put in". The success of this class and your understanding of course material is largely dependent on your active involvement in each class and assignment. Be sure to complete all readings before each class. Completing readings in advance will not only support your fellow classmates as they present but will also allow our class discussions to be much more interesting and conducted at a considerably higher level. Class attendance is critical to getting all that you can out of this course. Developing strong critical thinking skills as well as written and oral communication skills are essential to being able to evaluate and share research findings—key aspects of practicing evidence-based nutrition, wherever your career takes you!

If you are having difficulties in understanding the material or the assignments, please be proactive in letting me know. It is very likely that your classmates share your questions. In addition to the formal evaluation conducted by the department, I encourage you to e-mail me at any point during the course with your feedback, thoughts, and ideas.

#### **Course Website:**

There is a course website at <a href="http://courselink.uoguelph.ca">http://courselink.uoguelph.ca</a>. All components of this course will be housed on the CourseLink site including this course outline, assignments, and links to further resources. Your assignments will be submitted through the Dropbox function. Marks and feedback will also be released on the site. Please familiarize yourself with this website as soon as possible and visit it regularly throughout the semester.

## **Late Assignments:**

<u>All assignment deadlines will have a 48-hour grace period</u>. This means that no marks will be docked if you submit before the extra 48 hours period expires. Emails asking for late submission during the grace period are not needed and will not be answered. Simply submit within the grace period. CourseLink will say your assignment is late, but if it is submitted within 48 hours of the deadline, it is within the grace period and your assignment is not late.

Late assignments will be accepted up to 5 days following the grace period and will receive a penalty of 10% per day EXCEPT under documented grounds for compassionate consideration. Please reach out to discuss supports if you feel you are not able to meet deadlines for compassionate reasons. Assignments submitted more than one week late without documented grounds will receive a grade of zero. If you are going to hand an assignment in late, you must contact me inform me when you will be submitting your assignment.

# **Receipt of Grades:**

After you receive a grade on CourseLink, please review your feedback. Any inquiry or dispute over the grade must be made within two weeks from the date they are posted. If you fail to protest any grade during this time limit, changes to the grade will not be considered. Grades will be based on the Grading Procedures outlined in the Undergraduate Calendar.

#### **Turnitin Software:**

In this course, your instructor will be using Turnitin, integrated with the CourseLink Dropbox tool, to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph.

All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing academic misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

#### **10.UNIVERSITY STATEMENTS**

#### E-mail communication:

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

#### 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. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration.

## Drop date:

Courses that are one semester long must be dropped by the end of the last day of classes; two-semester courses must be dropped by the last day of classes in the second semester. The regulations and procedures for <u>Dropping Courses</u> are available in the Undergraduate Calendar.

# 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.

## 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 make a booking at least 14 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time.

More information: www.uoguelph.ca/sas

#### Academic misconduct:

The <u>Academic Misconduct Policy</u> is outlined in the Undergraduate Calendar.

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 discourages misconduct. 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.

Instructors **shall not** determine if academic misconduct has occurred. This is up to the Associate Dean Academic's office. Instructors shall not assign a grade of zero even if they believe that the student has committed some form of academic misconduct (e.g., copied material from a website like CourseHero) on an assignment or exam.

Instructors <u>can</u> determine if a student has poorly paraphrased and/or improperly cited material and can provide a grade accordingly as long as this is clearly identified as part of the assessment criteria via a rubric or other assessment tools.

For more information about Academic Integrity resources and how to prevent Academic Misconduct see: <a href="https://csahs.uoguelph.ca/faculty-research/hub-teaching-learning-excellence/academic-integrity">https://csahs.uoguelph.ca/faculty-research/hub-teaching-learning-excellence/academic-integrity</a>

#### **Recording of materials:**

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

#### **Resources:**

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

#### Disclaimer:

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via Courselink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (<a href="https://news.uoguelph.ca/2019-novel-coronavirus-information/">https://news.uoguelph.ca/2019-novel-coronavirus-information/</a>) and circulated by email.

#### Illness:

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

# **COVID-19 Safety Protocols:**

For information on current safety protocols, follow these links:

- https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safereturn/
- <a href="https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces">https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces</a>

Please note, that these guidelines may be updated as required in response to evolving University, Public Health or government directives.