

# NUTR\*4900 Selected Topics in Human Nutrition – Prenatal Nutrition

# **COURSE OUTLINE – WINTER 2019**

# **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
<b>Course Hours:</b>	3-0 (36 lecture; 0 lab/seminar)
Pre-Requisite(s):	<u>FRHD*3070</u> , ( <u>NUTR*3040</u> or <u>NUTR*3090</u> ), <u>NUTR*4010</u>
Co-Requisites(s):	n/a
Restriction(s):	Registration in B.A.Sc. AHN major

# 2. COURSE DESCRIPTION

This course requires reading and discussion on selected areas in human nutrition and its application; oral presentations and term papers. The topic focus will be recent studies in prenatal nutrition. Primarily for Applied Human Nutrition majors.

# 3. TIMETABLE

Lecture:	Tuesday and Thursday, 11:30AM -12:50PM,
Location:	MCKN, Room 223
Final Exam:	none

# 4. INSTRUCTIONAL SUPPORT

Course Instructor:	Laura Forbes, PhD, RD	
Email:	forbesl@uoguelph.ca	
Telephone:	519-824-4120 ext. 52544	
Office:	MACS 326	
Office Hours:	By appointment	

# 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. <u>http://www.lib.uoguelph.ca.subzero.lib.uoguelph.ca/get-assistance/writing/citations</u>

#### 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 Get Assistance > Map, GIS & Data > Book Maps, GIS & Data Appointments
  - 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 Citation Help page for help with citing: <u>https://www.lib.uoguelph.ca/get-assistance/writing/citations</u>
- 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. <u>https://www.lib.uoguelph.ca/get-assistance/writing/citations</u>

# 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.
- 4. To develop peer review skills on oral and written work appraising the research literature.

From the Integrated Competencies for Dietetic Education and Practice (2013; <u>http://www.pdep.ca/</u>): **Performance Indicators:** 

Competency PI	How PI is met	
1. Professional Practice		
1.06e Obtain and interpret evidence	Final term paper and seminar presentation	
1.09b Use technology to communicate	Use PowerPoint to present a research	
	article critique and a seminar	
1.09d Use technology to seek and manage	Use various health science databases to	
information	find research articles	
1.11d Recognize the importance of new	Part of the critical assessment of an article	
knowledge to support or enhance practice		
1.13a Demonstrate knowledge of research	Two research article critique assignments:	
and evaluation principles	one oral, one written	
2. Communication and Collaboration		
2.02c Edit written material for style,	Two written assignments: an article	
spelling and grammar	critique and a term paper	
2.02d Write clearly and concisely, in a	Two written assignments: an article	
manner responsive to the needs of the	critique and a term paper	
reader(s)		
2.02e Write in an organized and logical	Two written assignments: an article	
fashion	critique and a term paper	
2.02f Provide accurate and relevant	Two written assignments: an article	
information in written material	critique and a term paper	
2.02g Ensure that written material	Two written assignments: an article	
facilitates communication	critique and a term paper	
2.03b Speak clearly and concisely, in a	Three oral assignments: student as	
manner responsive to the needs of the	discussant for a classmate's seminar;	
listener(s)	article critique; seminar	
2.03d Use appropriate tone of voice and	Three oral assignments: student as	
body language	discussant for a classmate's seminar;	
	article critique; seminar	
2.04b Utilize active listening	Students are discussants of another	
	student's article critique	
2.04d Communicate in a respectful	Three oral assignments: student as	
manner	discussant for a classmate's seminar;	
	article critique; seminar	
2.04n Seek, respond to and provide	Students do peer review of another	
feedback	student's final paper	

# Foundational Knowledge Specifications:

FKS content area	Cognitive complexity level (1,2,3)	How KFS is met
3. Communication		
3c) Strategies for effective written communication	3	Two written assignments: One individual article critique and one term paper

FKS content area	Cognitive complexity level (1,2,3)	How KFS is met
3e) Strategies for effective oral communication	3	Three oral presentation assignments: One article critique, one discussant presentation and one individual seminar
16. Professional Practice in Dietetics		
16h) Role of research and new knowledge	3	The two written and three oral assignments described above
18. Research and Evaluation		
<ul> <li>Meets all FKS (with the exception of d):</li> <li>a) Theoretical foundations of research</li> <li>b) Qualitative, quantitative and mixed methodologies</li> <li>c) Ethics in research</li> <li>e) Literature search strategies</li> <li>f) Systematic review and critical appraisal of literature</li> <li>g) Use of technology to seek and manage information</li> </ul>	3	The two written and three oral assignments described above

# 7. TEACHING AND LEARNING ACTIVITIES

Date	Topics	Assigned Readings &	Notes &
		Guest Speakers	Due Dates
Jan. 8	Intro		
Jan. 10	Research Methods Review	<ol> <li>Handout "Using a scientific journal article to write a critical review"</li> <li>Guyatt et al. "GRADE" What is Quality of Evidence?</li> </ol>	<b>DUE today in class</b> : Tell me who your article critique partner is
Jan. 15	Stats Lecture		
Jan. 17	Sample Critique	Fayyaz F, Wang F, Jacobs RL, O'Connor DL, Bell RC, Field CJ, Team AS. Folate, vitamin B12, and vitamin B6 status of a group of high socioeconomic status women in the Alberta Pregnancy Outcomes and Nutrition (APrON) cohort. Appl Physiol Nutr Metab. 2014 Dec;39:1402-8.	

Topics	Assigned Readings &	Notes &
	Guest Speakers	Due Dates
Finding Literature	Guest Presenter Madeline Donnelly	
Finding Literature Student presentations	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, McPhee AJ, Turnbull D, Yelland LN, Deussen AR, Grivell RM, Crowther CA, Wittert G, Owens JA, et al. The effects of antenatal dietary and lifestyle advice for women who are overweight or obese on neonatal health outcomes: the LIMIT randomised trial. BMC Med. 2014 Oct;12:163 Discussants 2 Presenters 3 Gray-Donald K1, 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	
		Finding LiteratureGuest Presenter Madeline DonnellyStudent presentationsPresenters 1Dzakpasu 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, McPhee AJ, Turnbull D, Yelland LN, Deussen AR, Grivell RM, Crowther CA, Wittert G, Owens JA, et al. The effects of antenatal dietary and lifestyle advice for women who are overweight or obese on neonatal health outcomes: the LIMIT randomised trial. BMC Med. 2014 Oct;12:163 Discussants 2 Presenters 3 Gray-Donald K1, 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

Date	Topics	Assigned Readings &	Notes &
		Guest Speakers	Due Dates
Jan. 29	Student presentations	Presenters 1	
		Lussana F, Painter RC, Ocke MC,	
		Buller HR, Bossuyt PM, Roseboom TJ.	
		Prenatal exposure to the Dutch	
		famine is associated with a	
		preference for fatty foods and a more	
		atherogenic lipid profile. Am J Clin	
		Nutr. 2008 Dec;88:1648-52.	
		Discussants 1	
		Presenters 2	
		Ware S, Voigt JP, Langley-Evans SC.	
		Body composition and behaviour in	
		adult rats are influenced by maternal	
		diet, maternal age and high-fat	
		feeding. J Nutr Sci. 2015;4:e3.	
		Discussants 2	

Date	Topics	Assigned Readings &	Notes &
		Guest Speakers	Due Dates
Jan. 31	Student presentations	Presenters 1 Zuccolo L, Lewis SJ, Smith GD, Sayal K, Draper ES, Fraser R, Barrow M, Alati R, Ring S, et al. Prenatal alcohol exposure and offspring cognition and school performance. A 'Mendelian randomization' natural experiment. Int J Epidemiol. 2013 Oct;42:1358-70. Discussants 1 Presenters 2 Strandberg-Larsen K, Poulsen G, Bech BH, Chatzi L, Cordier S, Dale MTG, Fernandez M, Henriksen TB, Jaddoe VW, et al. Association of light-to- moderate alcohol drinking in pregnancy with preterm birth and birth weight: elucidating bias by pooling data from nine European cohorts. Eur J Epidemiol. 2017 Sep;32:751-64. Discussants 2 Presenters 3 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 3	DUE: Term Paper Topic Approval submit to Dropbox by 11:59

Date	Topics	Assigned Readings &	Notes &
		Guest Speakers	Due Dates
Feb. 5	Student presentations	Presenters 1Taylor CM, Golding J, Emond AM.Blood mercury levels and fishconsumption in pregnancy: Risks andbenefits for birth outcomes in aprospective observational birthcohort. Int J Hyg Environ Health. 201608;219:513-20.Discussants 1Presenters 2Donazar-Ezcurra M, Lopez-Del BurgoC, Martinez-Gonzalez MA, Basterra-Gortari FJ, de Irala J, Bes-Rastrollo M.Soft drink consumption andgestational diabetes risk in the SUNproject. Clin Nutr. 2017 Feb.Discussants 2Presenters 3Graham JE, Mayan M, McCargar LJ,Bell RC, Team SM. Makingcompromises: a qualitative study ofsugar consumption behaviors duringpregnancy. J Nutr Educ Behav. 20132013 Nov-Dec;45:578-85.Discussants 3	Dr. F will return your Term Paper Approvals in class

Date	Topics	Assigned Readings &	Notes &
		Guest Speakers	Due Dates
Feb. 7	Student presentations	Presenters 1 Meinilä J, Valkama A, Koivusalo SB, Stach-Lempinen B, Rönö K, Lindström J, Kautiainen H, Eriksson JG, Erkkola M. Is improvement in the Healthy Food Intake Index (HFII) related to a lower risk for gestational diabetes? Br J Nutr. 2017 Apr;117(8):1103-1109. Discussants 1 Presenters 2 Izadi V, Tehrani H, Haghighatdoost F, Dehghan A, Surkan PJ, Azadbakht L. Adherence to the DASH and Mediterranean diets is associated with decreased risk for gestational diabetes mellitus. Nutrition. 2016 Oct;32(10):1092-6. Discussants 2	
Feb. 12	Writing a literature review	Guest Presenter Sarah Gibbons	
Feb. 14	No class – Dr. F is away		
Feb. 19- 21	Reading week	No class!	
Feb. 26	Open work time/ get help from Dr. F		<b>DUE</b> : written critical appraisal – submit to Dropbox by 11:59 pm
Feb. 28	Seminars	1. 2.	
Mar. 5	Seminars	1. 2.	
Mar. 7	Seminars	1. 2.	
Mar. 12	Seminars	1. 2.	
Mar. 14	Seminars	1. 2. 3.	
Mar. 19	Seminars	1. 2. 3.	

Date	Topics	Assigned Readings &	Notes &
		Guest Speakers	Due Dates
Mar. 21	Seminars	1.	DUE Mar 22: Submit your draft
		2.	term paper for peer review to
		3.	by 11:59pm
Mar. 26	Seminars	1.	
		2.	
		3.	
Mar. 28	Seminars	1.	DUE Mar 29: Submit your
		2.	completed peer review by
		3.	11:59pm
Apr. 2	Seminars	1.	
		2.	
		3.	
Apr. 4	No class		DUE Apr. 5 : Self-reflection on
			engagement due in Dropbox by
			11:59 pm
			DUE: Term paper due in
			Dropbox by 11:59 pm

*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 7	15	
Discussant for an article critique (with same	3	Jan 24-Feb 7	5	
partner(s) as above)				
Individual student seminar	1, 2	Feb 28-Apr 2	20	
Written Assignments				
Term paper topic approval	1, 2	Jan 31 submit to Dropbox by	0	
		11:59 p.m.		
Individual critical appraisal	1, 2	Feb 26, submit to Dropbox by	10	
individual cifical applaisai		11:59 p.m.		
Individual term paper	1, 2	April 5, submit to Dropbox by	30	
ndividual term paper		11:59 p.m.		
Engagement				

		Throughout		
Participation in class discussions and self-	3	Self reflection due on Apr 5	10	
reflection on engagement		submit to Dropbox by		
		11:59		
		1. Submit your draft for		
		review by Mar 22 by 11:59		
Peer review of term paper	4	p.m.	10	
		2. Complete your peer		
		review by Mar 29 by 11:59		
		p.m.		
		Total:	100%	

# 9. COURSE STATEMENTS

## **Course Website:**

There is a course website at <u>http://courselink.uoguelph.ca</u>. 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:

Late assignments will be accepted up to 5 days following the due date and will receive a penalty of 10% per day EXCEPT under documented grounds for compassionate consideration. 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 your course instructor to inform them 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. <u>Grades will be based on the Grading</u> <u>Procedures outlined in the Undergraduate Calendar</u>.

#### **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 in-course requirements due to illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing with name, ID#, and email 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 fortieth class day; twosemester courses must be dropped by the last day of the add period 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 book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: www.uoguelph.ca/sas

# Academic misconduct:

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.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

## **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.