



# COLLEGE of SOCIAL AND APPLIED HUMAN SCIENCES

DEPARTMENT OF FAMILY RELATIONS  
AND APPLIED NUTRITION

## NUTR\*4010 Nutritional Assessment COURSE OUTLINE – FALL 2018

### 1. CALENDAR DESCRIPTION

This course examines the principles and methods used in nutritional assessment of individuals and populations in health and disease states. Dietary, anthropometric and biochemical techniques will be primary components. Nutritional screening, advanced techniques for body composition assessment, physical exam and clinical indicators will also be addressed. Significant independent learning will be required.

|                          |  |
|--------------------------|--|
| <b>Credit Weight:</b>    | 0.5 credits                                  |
| <b>Course Hours:</b>     | 3-0 (24 lecture; 0 lab/seminar)              |
| <b>Pre-Requisite(s):</b> | 14.50 credits including NUTR*2050, NUTR*3210 |
| <b>Co-Requisites(s):</b> | None   |
| <b>Restriction(s):</b>   | Registration in the B.A.Sc. AHN major        |

### 2. COURSE DESCRIPTION

This course examines the principles and methods used in nutritional assessment in clinical, public health and research settings. Dietary, anthropometric clinical and biochemical techniques will be the primary components. We will cover everything from brief nutritional screening techniques to rigorous, advanced techniques for collecting the best quality data. This course will give students the tools they need to plan clinical or research nutritional assessments and to interpret the scientific literature for incorporation into an evidence-based dietetic practice.

### 3. TIMETABLE

|                    |  |
|--------------------|--|
| <b>Lecture:</b>    | Tuesdays and Thursdays, 10:00 – 11:20 AM |
| <b>Location:</b>   | MCKN, Room 031                           |
| <b>Final Exam:</b> | 02:30PM - 04:30PM (2018/12/05) Room TBA  |

### 4. INSTRUCTIONAL SUPPORT

|                           |                         |
|---------------------------|-------------------------|
| <b>Course Instructor:</b> | Dalia El Khoury, PhD    |
| <b>Email:</b>             | delkhour@uoguelph.ca    |
| <b>Telephone:</b>         | 519-824-4120 ext. 56326 |
| <b>Office:</b>            | MACS 226                |

**Office Hours:** By appointment

**Course Instructor:** Janis Randall Simpson, PhD RD FDC

**Email:** rjanis@uoguelph.ca

**Telephone:** TBD

**Office:** TBD

**Office Hours:** TBD

**Teaching Assistant:** Karol-Ann Roy

**Email:** karolann@uoguelph.ca

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**Office Hours:** by appointment

## 5. LEARNING RESOURCES

### Required Resource(s):

None

### Recommended Resource(s):

Gibson, R.S. (2005). Principles of nutritional assessment, 2nd Ed. New York: Oxford University Press. Available on reserve in McLaughlin library.

*This text is meant to be used as a background resource. We will be drawing upon additional resources for more current Canadian content. Please see the reading list posted on CourseLink for additional recommended readings. Links to all recommended journal articles and websites will be posted on CourseLink.*

## 6. LEARNING OUTCOMES

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

1. Design comprehensive nutritional assessment plans (including dietary intake, anthropometric measurements, biochemical and medical tests, physical findings and client personal and medical history) for different situations, particularly by completing an assessment plan for a clinical case study.
2. Analyze and interpret nutritional assessment data of individuals and groups by manipulating class-generated data.
3. Describe how different methods of nutritional assessment work by describing how methods are affected by human biology, biochemistry, assessment technology, bias and measurement error.
4. Describe how and why different methods of nutritional assessment are used in clinical and research situations by describing their strengths and weaknesses.

## 7. TEACHING AND LEARNING ACTIVITIES

| Week | Topics                    | Assigned Readings & Guest Speakers  | Notes & Due Dates |
|------|---------------------------|---|-------------------|
| 1    | Course Overview           |   | Sept. 6           |
| 2    | Dietary Assessment        | Methods of Measuring Intake   | Sept. 11          |
|      |                           | Methods of Measuring Intake – continued   | Sept. 13          |
| 3    |                           | Using Food and Nutrient Databases   | Sept. 18          |
|      |                           | Accuracy, Precision and Validity of Dietary Assessment                                    | Sept. 20          |
| 4    |                           | Introduction to the Dietary Reference Intakes (DRIs)                                      | Sept. 25          |
|      |                           | Assessing the Intakes of Individuals using the DRIs                                       | Sept. 27          |
| 5    |                           | Assessing the Intakes of Groups using the DRIs  | Oct. 2            |
|      |                           | The DRIs and Eating Well With Canada's Food Guide   | Oct. 4            |
| 6    | <b>No CLASS</b>           | <b>FALL STUDY BREAK DAY</b>   | <b>Oct. 9</b>     |
|      | Anthropometric Assessment | Pediatric Anthropometric Assessment<br><br><b>Dietary Assessment Assignment Due (15%)</b> | Oct. 11           |
| 7    |                           | Adult Anthropometric Assessment   | Oct. 16           |
|      |                           | Measuring Body Composition  | Oct. 18           |
| 8    | Midterm Exam (30%)        | Covers materials from Sept. 6 – Oct. 18 (inclusive)<br>(In Class)                         | Oct. 23           |
|      | Skill Building            | Assignment 2 Skill Building + Reading and Evaluating Research Methods Papers              | Oct. 25           |
| 9    | Clinical Assessment       | Screening in Clinical Assessment  | Oct. 30           |
|      |                           | Medical History and Physical Exams in Clinical Assessment                                 | Nov. 1            |

| Week | Topics                 | Assigned Readings & Guest Speakers  | Notes & Due Dates                          |
|------|------------------------|---|--|
| 10   |                        | Energy Expenditure and Energy Requirements in Clinical Practice and Research<br><br><b>Outline and Key Abstracts Due (5%)</b> | Nov. 6                                     |
|      |                        | Assessment of Protein-Energy Malnutrition   | Nov. 8                                     |
| 11   | Biochemical Assessment | Introduction to Biochemical Assessment & Protein Status   | Nov. 13                                    |
|      |                        | Introduction to Biochemical Assessment & Protein Status – continued   | Nov. 15                                    |
| 12   |                        | Biochemical Assessment for Anemia   | Nov. 20                                    |
|      |                        | Nutrients of Concern in the Developing World  | Nov. 22                                    |
| 13   |                        | Wrap up and review class<br><br><b>Full Nutrition Assessment Plan Assignment Due (20%)</b>                                    | Nov. 27                                    |
|      | Final Exam (30%)       | Covers materials from Oct. 30 – Nov. 22 (inclusive)   | 02:30PM - 04:30PM<br>(2018/12/05) Room TBA |

**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  | Due Date          | % of Final |
|---|-------------------|------------|
| <b>Assignment 1 - Dietary Assessment</b><br>Assessment of individual and group data using the Dietary Reference Intakes                                     | Thursday, Oct. 11 | 15%        |
| <b>Midterm Exam – multiple choice and short answer questions</b><br>Covers dietary and anthropometric assessment (content from Sept. 6 – Oct. 18 inclusive) | Tuesday, Oct. 23  | 30%        |

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**Assignment 2 - Nutritional Assessment Plan**

Plan a nutritional assessment for a clinical scenario

|  |                       |             |
|--|-----------------------|-------------|
| <b>Outline and Key Abstracts</b>   | Tuesday, Nov. 6       | 5%          |
| <b>Final Nutrition Assessment Plan</b>   | Tuesday, Nov. 27      | 20%         |
| <b>Final Exam – multiple choice and short answer questions</b>                           | 02:30PM - 04:30PM     | 30%         |
| Covers clinical and biochemical assessment<br>(content from Oct. 30 – Nov. 22 inclusive) | (2018/12/05) Room TBA |             |
| <b>Total:</b>  |                       | <b>100%</b> |

## 9. COURSE STATEMENTS

### Course Website:

There is a course website at <http://courselink.uoguelph.ca>. 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 5% 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. [Grades will be based on the Grading Procedures outlined in the Undergraduate Calendar.](#)

### Turnitin Software:

Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. As the Undergraduate Calendar states: "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".

In this course, both the students and instructor can use Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying. For Assignment 2 (Nutritional Assessment Plan), you are required to screen your own written assignment 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; two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](#) 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](http://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 [Academic Calendars](#) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.