

**NFS487F**  
**Prof. García-Bailo**  
**Fall 2018**

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**Nutrigenomics & Personalized Nutrition**

**Department of Nutritional Sciences**  
**University of Toronto**

# NFS487F Nutrigenomics & Personalized Nutrition – Fall 2018

**Lectures:** W 1pm – 3 pm, MS2173  
**Tutorials:** W 3pm – 4 pm, MS2173

**Instructor:** Dr. Bibiana García-Bailo  
Department of Nutritional Sciences  
Medical Sciences Building, Room 5326  
e-mail: [bibiana.garcia.bailo@mail.utoronto.ca](mailto:bibiana.garcia.bailo@mail.utoronto.ca)  
*Office hours are immediately after each lecture, or by appointment*

## Material:

Course notes and handout material will be posted on the course website.

### Textbook (Required):

*Nutrigenetics – Applying the Science of Personal Nutrition*, by Martin Kohlmeier (Academic Press / Elsevier), 2013. Total of 384 pages, hardcover.  
This textbook is available electronically through the UofT library system.

Students will have the option to undergo genetic testing using Nutrigenomix®. All students can **register for a student account** by going to [www.nutrigenomix.com](http://www.nutrigenomix.com) and selecting Education and Training at the bottom right of the page, then selecting the 'University Courses' tab.

## Evaluation:

Term Test #1.....	30%
(October 24 <sup>th</sup> )	
Special Topics Group Presentation .....	30%
(Nov 14 <sup>th</sup> , Nov 21 <sup>st</sup> , Nov 28 <sup>th</sup> )	
Peer Evaluation .....	10%
Written Assignment .....	30%
(December 5 <sup>th</sup> )	
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<b>Total</b>	<b>100%</b>

## Term Test

The term test (October 24<sup>th</sup>) will include all the material covered prior to the test, including required readings. The format will consist of short-answer and essay-type questions.

## Special Topics Group Presentation

Each group will critique a scientific paper assigned by the instructor and give a 20-minute (maximum) PowerPoint presentation on the topic. Each presentation must include, at the beginning, a slide with the title, date, names of group members and role of each group member.

## Peer Evaluation

To encourage participation, each student will be required to evaluate each presentation, indicating strengths and areas for improvement.

## Written Assignment

Students will be required to choose from one of two assignments, related to diet-gene interaction. ***Students will be required to indicate their choice of assignment through Quercus by November 2<sup>nd</sup>.***

**Assignments must be uploaded to Quercus by December 5<sup>th</sup> at 3pm. In addition, please submit a hard copy to the Dept. of Nutritional Sciences Main Office (MSB Room 5253A) by December 5<sup>th</sup> at 3pm.**

*Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.*

All students are expected to either submit to Turnitin, which is voluntary, or provide an alternative. Assignments uploaded to Quercus will automatically be submitted to Turnitin, after you indicate agreement with the Turnitin service. If you do not wish to submit through Turnitin, please contact the instructor to discuss an alternate method.

## Final Exam

There will be **no** final exam.

## Course Outline

Week 1 (Sept 12 <sup>th</sup> )	Introduction to nutrigenomics and personalized nutrition
Week 2 (Sept 19 <sup>th</sup> )	'Omics' Technologies used in nutrition Chapter 2 "How genetic transmission works"
Week 3 (Sept 26 <sup>th</sup> )	Genetic variation and nutrient response Chapter 4 "How nutrients are affected by genetics"
Week 4 (Oct 3 <sup>rd</sup> )	Consumer genetics and personalized nutrition Chapter 8 "Keeping genetic information safe"
Week 5 (Oct 10 <sup>th</sup> )	Food Intolerances Guest Lecturer – Dr. Joseph Jamnik.
Week 6 (Oct 17 <sup>th</sup> )	Nutritional Epidemiology and Study Design Guest Lecturer – Dr. Anthony Hanley
Week 7 (Oct 24 <sup>th</sup> )	<b>Term Test #1</b> (Location TBA)
Week 8 (Oct 31 <sup>st</sup> )	Genetic determinants of eating behaviours Guest Lecturer – Dr. Karen Eny
Week 9 (Nov 7 <sup>th</sup> )	Reading Week – No class
Week 10 (Nov 14 <sup>th</sup> )	Group Presentations (Groups 1-4) <b>(ALL presentations to be uploaded to Quercus by 10am, Nov. 14<sup>th</sup>)</b>
Week 11 (Nov 21 <sup>st</sup> )	Group Presentations (Groups 5-8)
Week 12 (Nov 28 <sup>th</sup> )	Group Presentations (Groups 9-12)

**\*\*\*\*Written assignment to be uploaded to Quercus by 3pm, Dec. 5<sup>th</sup>\*\*\*\***

***AND***

**A hard copy of the written assignment must be submitted to the Dept. of Nutritional Sciences Main Office (MSB Room 5253A) by December 5<sup>th</sup> at 3pm.**