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
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
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 and selecting Education and Training at the bottom right of the page, then selecting the ‘University Courses’ tab.

Evaluation:

Term Test #1.............................................. 30%
(October 24th)

Special Topics Group Presentation .......... 30%
(Nov 14th, Nov 21st, Nov 28th)

Peer Evaluation ...................................... 10%

Written Assignment ............................... 30%
(December 5th)

Total ........................................ 100%
Term Test

The term test (October 24th) 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 2nd.

Assignments must be uploaded to Quercus by December 5th at 3pm. In addition, please submit a hard copy to the Dept. of Nutritional Sciences Main Office (MSB Room 5253A) by December 5th 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  Introduction to nutrigenomics and personalized nutrition  
(Sept 12th)

Week 2  ‘Omic’ Technologies used in nutrition  
(Sept 19th)  Chapter 2 “How genetic transmission works”

Week 3  Genetic variation and nutrient response  
(Sept 26th)  Chapter 4 “How nutrients are affected by genetics”

Week 4  Consumer genetics and personalized nutrition  
(Oct 3rd)  Chapter 8 “Keeping genetic information safe”

Week 5  Food Intolerances  
(Oct 10th)  Guest Lecturer – Dr. Joseph Jamnik.

Week 6  Nutritional Epidemiology and Study Design  
(Oct 17th)  Guest Lecturer – Dr. Anthony Hanley

Week 7  **Term Test #1**  
(Oct 24th)  (Location TBA)

Week 8  Genetic determinants of eating behaviours  
(Oct 31st)  Guest Lecturer – Dr. Karen Eny

Week 9  Reading Week – No class  
(Nov 7th)

Week 10  Group Presentations (Groups 1-4)  
(Nov 14th)  (ALL presentations to be uploaded to Quercus by 10am, Nov. 14th)

Week 11  Group Presentations (Groups 5-8)  
(Nov 21st)

Week 12  Group Presentations (Groups 9-12)  
(Nov 28th)

****Written assignment to be uploaded to Quercus by 3pm, Dec. 5th****

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