EXERSCI 206
Exercise Nutrition
(15 points)
(Semester 2, City Campus)
Prerequisites: 15 points from BIOSCI 107 or MEDSCI 142

Who should take this course?
Nutrition has a major influence on human health and performance. If you are interested in understanding the science and application of nutrition to support a physically active lifestyle, or enhance athletic performance, then you will benefit from this course.

Exercise Nutrition is an integrative science topic that combines human physiology, biochemistry and dietetics. A deep understanding of these disciplines is not required for this course, but you should be familiar with basic human organ systems physiology and metabolism. An understanding of exercise physiology (EXERSCI or SPORTSCI 201) and exercise prescription (EXERSCI or SPORTSCI 105) is also helpful, but extra support for these topics is available to BSc students with no Exercise Sciences (formerly Sport & Exercise Science) background.

Learning Outcomes
At the completion of this course a student would be expected to:

- Understand the basic physiology and biochemistry behind nutrients and their metabolism.
- Appreciate the inseparability of physical activity and nutrition for health and performance outcomes.
- Understand the basic tools of nutritional assessment.
- Be able to apply basic nutrient principles for health, exercise, and performance outcomes.
- Be able to apply basic scientific principles of nutrients and metabolism to the evaluation of supplements, popular diets, and special individual needs.

Learning and Teaching
This course provides scientific background for understanding principles of human nutrition as it applies to physical activity and sport. It introduces the physiology and biochemistry behind why and how nutrition works. The course examines macro- and micronutrients, the roles nutrition and metabolism play in exercise performance, body composition, and other applied topics.

Students are expected to attend two 1-hour lectures each week. Lectures are organised into four themes: 1. Fundamentals of fuel sources, energy metabolism, digestion and absorption of nutrients. 2. The role of macronutrients in human performance and adaptation. 3. The role of micronutrients, fluid, and dietary supplements in human performance and adaptation. 4. Applied topics that include disordered eating, weight management, drugs in sport, considerations for children and females.
Students are expected to attend nine 2-hour tutorials. ‘Drop In’ tutorial sessions are also available for additional support on a weekly basis. During tutorials, students will apply lecture material to practical and clinical assignments. Students will submit a dietary analysis report, deliver a presentation on a dietary supplement and submit a dietary recommendations report. Students will also participate in peer appraisal of classmates.

**Teaching Staff**

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**Assessment***

**Examination**

Mid-semester examination, 30 points (15%)  
Final examination, 100 points (50%)

**Coursework**

Dietary analysis, report = 23 points, peer assessment = 2 points (12.5%)  
Dietary supplements, presentation = 20 points, peer assessment = 5 points (12.5%)  
Dietary recommendations, report = 18 points, peer assessment = 2 points (10%)

* subject to change

**Recommended Textbooks**

Jeukendrup, A and M. Gleeson.  
Tamaki Library: 613.2024796

Clinical Sports Nutrition (2010) Burke, L. and Deakin V.  
Tamaki Library: 613.2024796

**Student Feedback**

100% student satisfaction rating in all response categories for both Course and Lecturer evaluations in 2007-2012.

29.08.2016