

FOOD20003 Food Chemistry, Biology and Nutrition

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Thirty-six hours of lectures and 12 hours of tutorials Total Time Commitment: 1 hr lecture (1 x weekly, for 12 weeks); 2 hr lecture (1 x weekly, for 12 weeks); 1 hr tutorial (1 x weekly, for 12 weeks). Contact hours = 48. Estimated total time commitment = 120 hrs.
Prerequisites:	BIOL10004 Biology of Cells and Organisms OR BIOL10002 Biomolecules and Cells AND CHEM10003 Chemistry 1 OR CHEM10006 Chemistry for Biomedicine OR CHEM10007 Fundamentals of Chemistry
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	Students are expected to be familiar with word processing, data management and graphical software packages and to be competent in electronic search techniques. This subject requires attendance at lectures and active participation in tutorials. For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Dr Kate Howell
Contact:	Melbourne School of Land & Environment Student Centre Ground Floor, Land & Food Resources (building 142) <i>Enquiries</i> Phone: 13 MELB (13 6352) Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)
Subject Overview:	The aim of this subject is to provide students with an understanding of the chemical structure of food components (natural materials of plant and animal origin plus additives) and the underlying biochemistry. The fate of these components in terms of their biological (enzymatic) and chemical degradation when consumed is explored in the context of their role in nutrition and cell biology.
Objectives:	Upon completion of this subject, students will be able to <ul style="list-style-type: none"> · describe the structure of the food components; · show some understanding between structure and physical and chemical properties of the food components; · demonstrate understanding of the digestion, absorption, transport and use of the food components by the human body; · demonstrate understanding of the nutritional significance of a range of foods.

Assessment:	Series of online quizzes (4 x 5%) during the semester and one final exam (3 hours; 60% of final marks); one written assignment of 1000 words, 20% of final marks due week 9 of the semester.
Prescribed Texts:	Coultrate, TP (2009) Food, the chemistry of its components (5 th edition) RSC
Recommended Texts:	deMan, John M. (1999) Principles of Food Chemistry. (3rd edition) Springer-Verlag.
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2012/B-ARTS) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2012/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/B-MUS) <p>You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<p>Upon completion of this unit, students should have developed:</p> <ul style="list-style-type: none"> # a profound respect for truth, intellectual and professional integrity, and the ethics of scholarship # capacity of independent critical thought, rational inquiry and self-directed learning and research # an ability to drive, interpret and analyse social, technical or economical information from multiple sources # skills in observation, critical analysis and report writing.
Notes:	This subject is available for science credit to students enrolled in the BSc (new degree only).
Related Majors/Minors/Specialisations:	Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.