

FOOD90007 Food Processing

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 48 hours of lectures Total Time Commitment: Estimated total time commitment (including non-contact time): 120 hours.
Prerequisites:	Eligibility for honours or postgraduate coursework program.
Corequisites:	None
Recommended Background Knowledge:	Chemistry and/or biology or equivalent background
Non Allowed Subjects:	None
Core Participation Requirements:	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 Stirk Kyle
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:	Preservation techniques (physical, chemical and biological) and applications including reference to legal requirements; processing operations - the principles of the process, factors influencing the selection of equipment and the effect on the food and food components: pumping; heat (direct, indirect, ultra heat treated); mixing and blending; separation and clarification; homogenisation; standardisation; concentration; drying/dehydration; freezing; membrane processing, diffusion techniques; extrusion; baking; emerging technologies: pulse technology, microwave, irradiation etc.; packaging; factory services; cleaning and sanitation.
Objectives:	The objective of this subject is to provide students with an understanding of the science and technology associated with the processing and preservation of foods by traditional and modern techniques. On completion of this subject students should be able to: <ul style="list-style-type: none"> # Demonstrate an understanding of the principles and application of food processing and preservation technologies # Describe the technologies used to effect preservation # Understand and evaluate the implications of processing and preservation methodologies on the physical, chemical, microbiological and nutritional quality of foods # Demonstrate an understanding of the basic unit and factory operations used in food processing # Evaluate processing technologies for their appropriate application
Assessment:	Major assignment of 2000 words focussing on an area of the subject in depth with all up-to-date references (40%), due two weeks prior to the end of semester Minor assignment of 1000

	words covering an area different to that in the major assignment (20%), due mid-way through semesterTwo hour written examination (40%).Assignments may be industry-based.
Prescribed Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<p>The objective of this subject is to provide students with an understanding of the science and technology associated with the processing and preservation of foods by traditional and modern techniques.</p> <p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # Demonstrate an understanding of the principles and application of food processing and preservation technologies # Describe the technologies used to effect preservation # Understand and evaluate the implications of processing and preservation methodologies on the physical, chemical, microbiological and nutritional quality of foods # Demonstrate an understanding of the basic unit and factory operations used in food processing # Evaluate processing technologies for their appropriate application
Related Course(s):	Bachelor of Science (Degree with Honours) Master of Food Science Postgraduate Certificate in Food Science Postgraduate Diploma in Food Science