AGRI90019 Fruit and Vegetable Technology

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 48 hours of lectures and practical activities Total Time Commitment: Estimated total time commitment (including non-contact time): 170 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 Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Dr Dorin Gupta
Contact:	**dorin.gupta@unimelb.edu.au (mailto:dorin.gupta@unimelb.edu.au)**
Subject Overview:	# Characteristics, composition and nutritional importance of fruit and vegetables; # Desirable and undesirable constituents; # Post-harvest handling # Genetic control of fruit ripening process; # Physical and chemical changes during maturation; # Principles of heat, moisture and environment management; # Quality: criteria, factors affecting, evaluation and management; # Pathological, disinfestation and physiological deterioration and their control; # Preservation and processing: basic principles of preservation; # Shelf life extension by scientific storage; # Use of sugar, chemicals, fermentation, irradiation in fruit preservation; # Processing methods # By-products of fruit and vegetables processing # Waste management: characterisation, planning, treatment of effluent; # Environmental auditing.
Learning Outcomes:	The objective of this subject is to introduce students to the science and technology associated with fruits and vegetables and their transformation into food products and ingredients. On completion of this subject, students should have an understanding of: # The structure and composition of fruits and vegetables and their role in nutrition.

	# The biochemistry and physiology of fruits and vegetables and their role in pre- and post-harvest changes and in product quality. # The concept of quality in relation to fruit and vegetable based products. # Pathological and physiological deterioration and their control. # Preservation and processing technologies applied to fruits and vegetables. # Production of fresh and manufactured food products and ingredients from fruits and vegetables.
Assessment:	One assignment of 1500 words (25%) due approximately in week 7. 1500 words report on practical activities (25%), due approximately two weeks after the conclusion of all practical classes. Two hour written examination (50%).
Prescribed Texts:	None
Recommended 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:	On completion of this subject students should have developed the following generic skills: # Skills in observation, critical analysis and report writing. # An ability to derive, interpret and evaluate social, technical and economic information from a wide variety of sources. # A capacity for independent critical thought, rational inquiry and self-directed learning and research. # An ability to communicate effectively in both written and verbal forms.
Related Course(s):	Graduate Certificate in Agricultural Sciences Graduate Certificate in Food Science Graduate Diploma in Agricultural Sciences Graduate Diploma in Food Science Master of Agricultural Science Master of Food Science Postgraduate Diploma in Agricultural Science Postgraduate Diploma in Food Science
Related Majors/Minors/ Specialisations:	100 Point (A) Master of Agricultural Sciences 100 Point (B) Master of Agricultural Sciences 150 Point Master of Agricultural Sciences 200 Point Master of Agricultural Sciences