

FOOD90035 Plant Food Products

Credit Points:	12.5									
Level:	9 (Graduate/Postgraduate)									
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.									
Time Commitment:	Contact Hours: 36 hours Lectures(including two industry tours of three hours each), and 12 hours of practical activities (48 hours total) Total Time Commitment: 170 hours									
Prerequisites:	None									
Corequisites:	None									
Recommended Background Knowledge:	It is recommended that students have completed at least a Level 1 subject in Chemistry and/or biology or equivalent in their undergraduate degree.									
Non Allowed Subjects:	Students should not have previously passed either of the following subjects: <table border="1" data-bbox="387 797 1485 1003"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>AGRI90019 Fruit and Vegetable Technology</td> <td>Semester 2</td> <td>12.5</td> </tr> <tr> <td>FOOD90009 Cereal, Legume and Oilseed Technology</td> <td>Semester 1</td> <td>12.5</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	AGRI90019 Fruit and Vegetable Technology	Semester 2	12.5	FOOD90009 Cereal, Legume and Oilseed Technology	Semester 1	12.5
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Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>									
Coordinator:	Dr Dorin Gupta									
Contact:	dorin.gupta@unimelb.edu.au									
Subject Overview:	<p>The food we eat plays a significant role in human well-being in order to keep pace with a fast-moving society. Cooking from raw materials on a daily basis at the household level in order to meet the human dietary requirements of nutritious and healthy food is far from reality; for this reason the food industry has grown to be one of the largest industries in the world.</p> <p>In order to meet the food demands of an ever-increasing human population and climactically-challenged nutritional composition of raw food materials, the need for food professionals who understand the science behind the sustainable processing and supply of food along with the right balance of nutrition and food safety has never been greater.</p> <p>This subject will provide students with an advanced understanding of the processing and preservation of grain, fruit and vegetable produce into food products through an integrated approach of science and technology. Students will study and connect with the origin of plant-based food produce, the original chemical and nutritional composition, food technology, changes in nutritional profile during processing and preservation and effect of climate change on the food industry.</p> <p>Students will understand the deep connection between food and processing at national and international level; the science behind processing and the quality maintenance of the processed products. Students will develop skills in critical-thinking, analysing and applying interactions of chemical compositions of plant produce and applied technology to achieve desired processed</p>									

	<p>food products; understanding international food market through practical exercises; industry visits; discussion; written review and examination.</p> <p>The subject will include topics such as:</p> <ul style="list-style-type: none"> # Connecting with plant-based produce (national and international level), and chemical and nutritional composition of plant-based produce and their interactions # Pre-processing handling # Cereal, legumes and oilseed processing technology # Fruit and vegetable processing technology # Quality assurance <p>Climate change and the challenge of producing and processing sufficient and quality food</p>
Learning Outcomes:	<p>The objective of this subject is to provide students with an advanced understanding of science and technology associated with plant-based food processing, interaction of ingredients and climate change affecting the food industry. On completion of this subject, students should be able to:</p> <ul style="list-style-type: none"> # Interpret the interactions of ingredients of plant-based produce and their functional role during processing # Use the concept and role of quality assurance for processed food products for the success of the food industry # Interpret the demand of certain type of processed food products based on the production of food products and ingredients of plant origin at national and international level with technological advancement from past to future # Evaluate the sustainable ways of food processing due to better understanding of the effect of climate change on food quantity and quality
Assessment:	<p>One 1500 word written review due approximately in the 5th week of semester worth 25% One 1500 word practical report due approximately in the 7th week of semester worth 25% One two-hour written exam due in the end-of-semester examination period worth 50% HURDLE REQUIREMENT: Reflective Blog on the LMS on any four week's topics</p>
Prescribed Texts:	<p>Readings will be provided via the Learning Management System (LMS).</p>
Breadth Options:	<p>This subject is not available as a breadth subject.</p>
Fees Information:	<p>Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees</p>
Generic Skills:	<p>Students will also develop the following generic skills:</p> <ul style="list-style-type: none"> # A deep understanding of the plant origin products processing # Skills in independent critical thinking, analysis, review and report writing # Effective written and oral communication skills # Capacity for independent critical thought, rational inquiry and self-directed learning and research # Capacity for creativity and innovation, through the application of skills and knowledge # Develop the ability to work as a team member # An ability to derive, interpret and evaluate social, technical and economic information from a wide variety of sources
Notes:	<p>It is advised that students undertaking this subject should be eligible for Honours or Postgraduate Coursework Programs prior to enrolling.</p>
Related Course(s):	<p>Graduate Certificate in Agricultural Sciences Graduate Certificate in Food Science Graduate Diploma in Agricultural Sciences Graduate Diploma in Food Science Master of Food Science</p>
Related Majors/Minors/Specialisations:	<p>100 Point (A) Master of Agricultural Sciences 100 Point (B) Master of Agricultural Sciences 150 Point Master of Agricultural Sciences</p>

200 Point Master of Agricultural Sciences