FOOD30009 Food Research & Development

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours (1 hour of lectures per week and equivalent of 3 hours of laboratory or industry based activities during weeks 4-11). Total Time Commitment: Total Time Commitment: 170 hours.
Prerequisites:	The following subjects, or equivalent.

Subject	Study Period Commencement:	Credit Points:
FOOD20003 Food Chemistry, Biology and Nutrition	Semester 1	12.50
FOOD20006 Food Microbiology and Safety	Semester 2	12.50
FOOD30008 Advanced Food Analysis	Semester 1	12.50

Corequisites:	None
Recommended Background Knowledge:	Completed 2nd year of food science major.
Non Allowed Subjects:	

Subject	Study Period Commencement:	Credit Points:
208-343 Food Science Project	Not offered 2010	

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:	Assoc Prof Said Ajlouni
Contact:	**said@unimelb.edu.au (mailto:said@unimelb.edu.au)**
Subject Overview:	The aim of this subject is to provide students with an understanding of the systematic processes involved food research and product development. This subject represents a capstone experience for food science major. It will allow students to experience and conduct basic research projects (minimum 6 weeks equivalent). Students are anticipated to implement the knowledge they have gained via the foundation and specialised studies in the preparation of a research proposal, and executing that proposal in a laboratory or industry environment. The outcomes will involve the development of a new food product, or solving a problem facing the food industry through knowledge of market research, product design and evaluation, packaging, safety, quality and regulatory requirements. The content includes: # research concept and proposal preparation

	# market research and understanding consumer needs; # product lifecycles and research case studies; # idea generation and evaluation; # product and process development - project planning; # formulation development and evaluation; # process development; # shelf-life testing; consumer testing; # market trial and strategy development; # product specification - raw materials, process, finished product; and # product evaluation, environmental impact and regulatory issues; packaging and labelling.
Learning Outcomes:	On completion of this subject students should be able to: # Gain significant skills in research planning and execution # Utilize their learned research skills and problem solving to challenge future workplace and community requirements. # Demonstrate an understanding of the systematic processes involved in new food product development. # Describe the role of the consumer, industry trends and product lifecycles in new product development. # Discuss the role of ideas generation and evaluation in the product development process. # Write a brief research proposal. # Prepare a flow chart for research project activities. # Describe the product development process. # Be able to explain the design issues relevant a new product specification. # Write and present data and finding in a scientific format
Assessment:	One hour mid-term exam (25%). One written report equivalent to 2000 words, due approximately in week 9 (50%). A 10-min oral presentation, starting approximately in week 8 of semester (25%).
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2015/B-ARTS)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2015/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2015/B-MUS)** 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.
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: # Improve personal contact with the food industry and research institutes. # Use proper methods of scientific report witting and oral presentation. # Understand organisational strategy and project management processes and their application in commercial food operations. # Evaluate technical and process data and communicate this information effectively in scientific written and verbal forms. # Work as team member in a research and/or an industry environment.
Notes:	Note: For the purposes of considering applications for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005) and Students Experiencing Academic Disadvantage Policy, this subject requires all students to actively and safely participate in practical exercises conducted in pilot-scale food processing facilities as well as visits to commercial food processing facilities.Such activities may involve lifting, climbing multiple

	stairs and movement around equipment and compliance with the various organisations' OH&S requirements. Students who feel disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
Related Majors/Minors/ Specialisations:	Food Science Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED