

FOOD90020 Food Biotechnology

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2012. Students wishing to undertake Food Biotechnology in 2012 should enroll in FOOD90011.
Time Commitment:	Contact Hours: 36 hours lectures and 24 hours of computer based tutorial or demonstration (5 hours per week) Total Time Commitment: Not available
Prerequisites:	Eligibility for honours or postgraduate degree
Corequisites:	None
Recommended Background Knowledge:	None
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/
Contact:	<p>Melbourne School of Land & Environment Student Centre Ground Floor, Land & Food Resources (building 142)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)</p>
Subject Overview:	<p>Principles of Molecular Biology (Gene cloning; Regulation of gene expression; Over-expression of required products); Applications of molecular biology techniques in plants, animals and micro-organisms important in food production and processing; Applications of molecular analytical techniques to the food industry (DNA probes; DNA micro-arrays; Bio-sensors; Rapid detection of pathogenic and spoilage organisms; immunoassays; Detection of GMO in foods; Novel techniques); Detection and extraction of value added products from foods; Bio-informatics (Database searching; Interpretation of results; Protein structure/function); Regulatory, environmental, safety and ethical issues related to the application of biotechnology in the food industry; Industrial Fermentations (Choice of organisms; Cultivation and preservation of cultures; Optimisation of fermentation conditions; Waste management).</p> <p>This subject aims to impart knowledge of: (i) genetics and genetic engineering techniques, with emphasis on microbial genetics; (ii) food fermentations; (iii) waste utilisation; and (iv) regulatory and ethical issues related to applications of food biotechnology.</p>
Objectives:	Information Not Available
Assessment:	Two assignments of 2000 words each (40%) – week 5 and week 9; three hour end of semester examination (60%).
Prescribed Texts:	Information Not Available
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:	Information Not Available

Related Course(s):	Master of Animal Science Postgraduate Diploma in Animal Science and Management
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