208-327 Molecular Biology of Food Microorganisms

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	This subject is not offered in 2008.
Time Commitment:	Contact Hours: Thirty-six hours of lectures and 24 hours of practicals and demonstrations Total Time Commitment: Not available
Prerequisites:	None
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 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
Subject Overview:	Microbes have been used in the food industry for centuries to extend shelf life and confer traits that alter the flavour, texture or nutritional value of the starting food materials. Improving the capability of microbes to perform their function has changed from natural selection of trains to targeted improvement through mutagenesis and the application of molecular biology techniques. This subject will provide an understanding of the principles involved in strain improvement and will include fundamentals of regulation and deregulation of biochemical pathways in microbes; mutagenesis and strain improvement methods; basic molecular biology techniques and their application in altering carbon flow in bacteria or protein synthesis; and current examples of manipulation of microbes and their use in the food industry. In both lectures and practical classes, research projects investigating the topic of molecular biology of food organisms, are used as examples of curent methodologies used in the area.
Assessment:	Four practical reports (20%), each report is 3 pages - double spaced; one 1000 word assignment (20%), one 3-hour examination (60%).
Prescribed Texts:	None
Recommended 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):	Bachelor of Food Science