411-455 Biocellular Engineering Research Proj 2

Credit Points:	25.00
Level:	4 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus. Semester 2, - Taught on campus. Laboratory, computer or literature-based research project (independent or team-based).
Time Commitment:	Contact Hours: Fifty-four hours (18 hours of lectures and 36 hours of consultation sessions) Total Time Commitment: Estimated non-contact time commitment of 192 hours.
Prerequisites:	**411-454** Biocellular Engineering Research Project 1
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
Coordinator:	Assoc Prof Andrea O'Connor
Subject Overview:	Candidates will undertake as individuals or as a member of a team a designated investigative project which could involve a critical literature review, experimental research and/or development, theoretical modelling, process simulation and/or the solution of an industrial or clinical problem. The project will generally build on the students' investigation in 411-454 Biocellular Engineering Research Project 1. Rigorous planning and scheduling of the project, time management, written and verbal technical communication, interpretation of results as and team work will be required. The objective is to acquaint students with the methodologies of research in Biocellular Engineering, to allow them to gain experience in the planning and conduct of an individual or team-based research project, and to develop their abilities to present orally and in writing the results of their research. Students successfully completing this unit should be able to plan and conduct an independent research project in Biocellular Engineering.
Objectives:	On completion of this subject students should be able to: · apply the skills necessary to complete a biomolecular engineering feasibility study and · carry out the integrated process and equipment design for an industrial chemical and/or biochemical process, which is an initially poorly-defined task for which much of the design data is not available. In completing the design they will apply most of the skills learned earlier in their course. · function as part of a team and manage their time effectively.
Assessment:	A written report of up to approximately 10,000 words, not including appendices, diagrams, tables, computations and computer output, due towards the end of semester, contributing 50% to the total assessment; an oral presentation contributing 25% and an assessment of the quality of the student's research work contributing 25%.

Prescribed 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:	The subject will enhance the following generic skills: # The ability to undertake problem identification, formulation and solution; # Capacity for independent thought # The ability to communicate effectively orally and in writing # The ability to plan work and use time effectively
Related Course(s):	Bachelor of Engineering (Biomedical)Biocellular