512-395 Intro. to Mathematical Psychology 3

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	This subject is not offered in 2008.
Time Commitment:	Contact Hours: Twenty-four hours of lectures, 12 hours of laboratory classes. [Estimated total time commitment of 120 hours.] Total Time Commitment: Not available
Prerequisites:	512-220 and 620-141 (or equivalent)
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:	Dr Paul Dudgeon
Subject Overview:	This subject introduces mathematical modelling of psychological phenomena. It reviews the role of quantification in the development of psychology and provides a broad overview of contemporary mathematical approaches to the representation of psychological phenomena. In addition, the modelling of a number of specific psychological phenomena is examined in depth. In-depth topics will be selected from psychophysics; the foundations of psychological measurement; models for response times; models for memory and attentional processes; judgement and decision-making models; models for motor control; computational models for cognitive processes; psychological scaling and latent variable models; and mathematical models for social and organisational processes.
Assessment:	A written report of no more than 2000 words (50%), and an examination of no more than two hours (50%).Each piece of assessment must be completed (hurdle requirement).Attendance at 80% or more of practical classes is a hurdle requiremnt. (In case of failure to meet the hurdle requiremnt, additional equivalent practical work will be required before a passing grade can be awarded.)
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:	On completion of this subject, students should be able to: critically evaluate the application of mathematical models in applied and theoretical contexts; more clearly communicate the application of mathematical methods to applied problems; identify and solve research problems amenable to mathematical representation.