EDUC90213 Item Response Modelling

Credit Points:	25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: Not available
Prerequisites:	There is one prerequisite:

Subject	Study Period Commencement:	Credit Points:
EDUC90215 Test and Scale Development	Semester 1, Semester 2	25

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	Attendance at all classes (tutorial/seminars/practical classes/lectures/labs) is obligatory. Failure to attend 80% of classes will normally result in failure in the subject.
Coordinator:	Prof Raymond Adams
Contact:	Education Student Centre
Subject Overview:	This unit provides an understanding of item response modelling. The subject examines item response theory from an advanced perspective, including the development of single and multiple parameter models, their specification, estimation and evaluation. Procedures for calibration and banking tasks based on rating and criterion referenced scales, constructed response and judgement-based assessments as well as choice tasks are explored. Additional topics include differential item functioning, test equating, and multi-faceted and multi-dimensional models. Applications of the models are explored with ConQuest.
Objectives:	To develop a familiarity with the estimation and application of advanced item response theory models.
Assessment:	Three papers totaling 8,000 words. Presentation of the papers (15 - 20 minutes) to class. 33 per cent to each paper and presentation.
Prescribed Texts:	None
Recommended Texts:	Hambleton, R.K, Swaminathan, H., & Rogers, H.J. (1991) Fundamentals of Item Response Theory. Newbury Park, California: Sage Publications.
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: # understand the derivation of dichotomous and polytomous Rasch Models; # apply the technique of simulation to explore item response modeling; # analyse item response data with facets models; # analyse multi-dimensional item response data; # analyse item response data with collateral variables;

	# estimate population characteristics from item response data; # understand issues relating to equating, item banking and test design.
Links to further information:	www.education.unimelb.edu.au
Notes:	Advanced skills in assessment design and analysis, test equating and interpretation, and a high level of statistical and mathematical skills.
Related Course(s):	Master of Assessment and Evaluation (Stream 100A) Coursework and ThesisA Master of Assessment and Evaluation (Stream 100B) Coursework Master of Assessment and Evaluation (Stream 150A) Coursework & Thesis A Master of Assessment and Evaluation (Stream 150B) Coursework Master of Assessment and Evaluation(Stream 150)Coursework & Major Thesis