

EDUC90460 Learning Area Mathematics (Additional) 2

Credit Points:	12.50		
Level:	9 (Graduate/Postgraduate)		
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus. Parkville, On Campus		
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 125 hours total commitment		
Prerequisites:	You must have successfully completed the following subject/s prior to enrolling in this subject		
	Subject	Study Period Commencement:	Credit Points:
	EDUC90457 Learning Area Mathematics 1	February	12.50
	EDUC90459 Learning Area Mathematics (Additional) 1	February	12.50
Corequisites:	Co or pre-req		
	Subject	Study Period Commencement:	Credit Points:
	EDUC90458 Learning Area Mathematics 2	Semester 2	12.50
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:	Mr Peter Flynn		
Contact:	Education Student Centre		
Subject Overview:	<p>This subject will focus on teaching and learning issues associated with developing school students' skills, strategies and dispositions for working mathematically. Themes to be considered include problem solving (including strategies and heuristics), mathematical modelling, extended investigations, real-world applications, integrating mathematics into other curriculum areas, project work, argumentation and conjecturing informal and formal proof, and the choice and use of technology to support mathematical work.</p> <p>Teacher candidates will examine a number of theories and theoretical perspectives on mathematical learning and how they inform teaching towards working mathematically.</p>		
Objectives:	<p>On completion of this subject, teacher candidates will be able to:</p> <ul style="list-style-type: none"> # Demonstrate an understanding of problem solving strategies and how to help school students to develop problem solving ability; # Demonstrate an understanding of mathematical modelling and applications and their importance in school students' mathematical learning; # Demonstrate the ability to foster school students' skills in mathematical conjecturing and reasoning; # Demonstrate an understanding of selected learning theories in mathematics education. 		
Assessment:	<p>There are 3 assessment tasks: A report (1500 words) due early semester (37.5%) A report (1500 words) due mid semester (37.5%) An essay (1000 words) due end of semester (25%) There is 1 hurdle requirement: Completion of weekly tasks.</p>		

Prescribed Texts:	CAS calculator Goos, M., Stillman, G., Vale, C. (2007) Teaching Secondary Mathematics: Research and Practice for the 21st Century. Crows Nest NSW: Allen & Unwin
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:	<p>On completion of this subject, teacher candidates will have the knowledge, skills and understanding to enable them to:</p> <ul style="list-style-type: none"> # Be skilled communicators who can effectively articulate and justify their practices as knowledgeable agents of changes. # Be flexible and able to adapt to change through knowing how to learn; # Understand the significance of developing their practice on the basis of research evidence; # Work in teams with skills in cooperation, communication and negotiation; # Be independent of mind, responsible, resilient, self-regulating; # Have a conscious personal and social values base.
Related Course(s):	<p>Master of Teaching (Secondary) Master of Teaching (Secondary)</p>