## PC-MATH10 Postgraduate Certificate in Mathematics Teaching (Years 7-10)

<u>7-10)</u>			
Year and Campus:	2012 - Parkville		
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees		
Level:	Graduate/Postgraduate		
Duration & Credit Points:	50 credit points taken over 12 months part time.		
Coordinator:	Professor Kaye Stacey		
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Course Overview:	The course aims to develop disciplinary knowledge of mathematics up to Year 10 level. Participants will master junior secondary school level mathematics content and significantly extend pedagogical understanding to teach effectively. The program consists of four compulsory subjects with a total accumulation of 50 credit points at completion. The course is targeted towards current secondary level mathematics school teachers, who at present are not qualified (with a mathematics major) to teach in the mathematics area.		
Objectives:	Students completing this course should be able to:		
	<ul> <li># demonstrate a good knowledge of the goals of teaching mathematics and the mathematical content expected in the school years which they are being prepared to teach;</li> <li># demonstrate a good knowledge of the resources for such teaching;</li> </ul>		
	<ul> <li># understand how students of the relevant year levels learn mathematics, and understand the ways to promote their learning;</li> <li># make effective use of research findings and evidence-based professional readings in addressing professional problems.</li> </ul>		
Course Structure & Available Subjects:	This course includes 50 credit points of coursework graduate studies which includes four compulsory subjects, each worth 12.5 credit points.		
Majors/Minors/ Specialisations	Not applicable		
Subject Options:	As follows:		
	Subject	Study Period Commencement:	Credit Points:
	EDUC90670 Teaching Number	January	12.50
	EDUC90669 Teaching Algebra	January	12.50
	EDUC90668 Teaching Chance and Data	Not offered 2012	12.50
	EDUC90667 Teaching Space and Measurement	Not offered 2012	12.50
Entry Requirements:	An applicant may be eligible for entry into the Postgraduate Certificate in Mathematics Teaching (Years 7-10), if the applicant has:  # an undergraduate degree and a fourth-year level education qualification, or equivalent, or  # a four-year education degree, or equivalent.		
Core Participation Requirements:	The Melbourne Graduate School of Education welcomes applications from students with disabilities. It is University and Graduate School policy to take reasonable steps to enable the participation of students with disabilities, and reasonable adjustments will be made to enhance a student's participation in the Graduate School's programs. The core participation requirements for study in the Melbourne Graduate School of Education are:In all courses The ability to comprehend complex information related to education and the disciplines in which the student is teaching. The ability to communicate clearly and independently in assessment tasks a knowledge of the content, principles and practices relating to education and other relevant		

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disciplines. Behavioural and social attributes that enable a student to participate in a complex learning environment. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. In courses requiring students to undertake practicum placements The ability to undertake professional practice placements independently, including: a. the ability based on personal maturity to establish a professional relationship with students and interact with them appropriately;b. the ability to communicate to students the subject matter being taught with clarity and in a way that is age-sensitive;c. the ability to model literacy and numeracy skills independently for students and in all their interactions meet community expectations of the literacy and numeracy skills teachers should have d. the ability to demonstrate skilfully and safely activities required in particular discipline areas being taught (e.g. physical education activities, science laboratory techniques);e. the ability to create, monitor and maintain a safe physical environment, a stable and supportive psychological environment, and a productive learning environment in their classroom: f. the ability to establish effective relationships with all members of the school community, including colleagues, students, and caregivers; g. the ability based on mental and physical health to exercise sound judgment and respond promptly to the demands of classroom situations, and the personal resilience to cope and maintain their wellbeing under stress. Students who feel a disability will prevent them from meeting the above academic requirements are encouraged to contact the Disability Liaison Unit.

## **Graduate Attributes:**

This course will enable graduates to develop some of the graduate attributes that are relevant to a professional graduate degree. Students will move toward academic excellence in the discipline knowledge, pedagogical knowledge and pedagogical content knowledge for teaching the specified year levels in mathematics, through a program of lectures and structured activities. Through practical assignments undertaken in the work environment, students will develop skills of analysis and synthesis as applied to a professional work context, as well as an appreciation and respect for equity and diversity. Through playing an active role in the community of learners in the course, students will engage with meaningful evidence-based discourse in relation to the teaching of mathematics, and understand the broad goals and values of education for public and private good.

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