EDUC90401 Numeracy in the Early Years

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: March, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus. Parkville, On Campus
Time Commitment:	Contact Hours: 36 hours. Total Time Commitment: 125 hours total commitment. 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.
Prerequisites:	You must have successfully completed the following subject/s prior to enrolling in this subject

Subject	Study Period Commencement:	Credit Points:
EDUC90391 Science and Mathematics in EC	Semester 1	12.50

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 Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the HDisability Liaison Unit websiteH: Hhttp://www.services.unimelb.edu.au/disability/H
Coordinator:	Mrs Catherine Pearn
Contact:	Education Student Centre
Subject Overview:	This subject focuses on teaching mathematics in the first years of school. It examines the curriculum in the early years, specific early numeracy programs, the early diagnosis of mathematics learning difficulties and intervention strategies. Teacher candidates will learn the developmental stages in early mathematical learning of number, space and measurement; learn how to design appropriate teaching for children identified at each stage; and they will compare alternative approaches to the teaching of mathematics. The development of mathematical language for basic concepts is examined, along with strategies and resources for assisting those with specific language needs. A range of assessment instruments and reporting methods suitable for the early years will be studied. Teacher candidates will learn to teach mathematics for understanding by creating a supportive environment where children engage in discourse to develop deep mathematical thinking.
Objectives:	On completion of this subject teacher candidates will be able to: ＃ Demonstrate knowledge of the Early Years Victorian Mathematics curriculum; ＃ Demonstrate understanding of key progression points in the development of mathematical understanding; ＃ Demonstrate pedagogical content knowledge; ＃ Demonstrate the ability to evaluate examples and tasks to determine the mathematical knowledge involved; ＃ Monitor learning and design instruction that is targeted to each child's level of development; ＃ Demonstrate an understanding of how children construct mathematical knowledge;

	# Organise a classroom to maximise learning for all students.
Assessment:	There are 2 assessment tasks: A 2-hour examination due end of semester (50%) Written assignment (2000 words) due mid semester (50%). There is 1 hurdle requirement: Hurdle requirement: Satisfactory completion of weekly tasks.
Prescribed Texts:	Charlesworth, R. (2005). Experiences in Math for young children. Thomson. De Klerk, J. (2007) Illustrated Maths Dictionary (4th edition). Pearson. Collection of readings
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, teacher candidates will have the knowledge, skills and understanding to enable them to: # 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; # Be independent of mind, responsible, resilient, self-regulating.
Related Course(s):	Master of Teaching (Early Childhood)