EDUC90401 Numeracy in the Early Years

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: July, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 Total Time Commitment: 170 hours
Prerequisites:	

Subject	Study Period Commencement:	Credit Points:
EDUC90391 Science and Mathematics in EC	March	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 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:	Mrs Catherine Pearn
Contact:	**cpearn@unimelb.edu.au (mailto:cpearn@unimelb.edu.au)**
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. It explores the place of mathematics in an integrated curriculum and the use of ICT to support children's learning. 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.
Learning Outcomes:	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. # Demonstrate an ability to use ICT techniques and processes to support children's diverse mathematical learning needs
Assessment:	There are 2 assessment tasks: Written assignment (2000 words), due mid semester, 50% A 2-hour examination, end of semester, 50% Hurdle requirements: Satisfactory completion of eight weekly tasks, due throughout semester. This subject has a minimum hurdle requirement of 80% attendance at all scheduled lectures, tutorials, seminars and workshops.
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. # Demonstrate evidence of using advanced communication technologies to support children's diverse mathematical learning needs.
Links to further information:	https://handbook.unimelb.edu.au/view/current/MC-TEACHEC
Related Course(s):	Master of Teaching (Early Childhood) Master of Teaching (Early Years)