460-507 Primary Mathematics Education 2

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus. Parkville, On Campus
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 125 hours total commitment
Prerequisites:	None
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:	Vicki Steinle
Subject Overview:	Teacher candidates will develop pedagogical content knowledge for the effective teaching and learning of the topics of Space, Structure, Working Mathematically, Measurement, Chance and Data from Prep to Year 6. Teacher candidates will review and critique curriculum resources for primary mathematics and construct lessons to achieve specific learning outcomes in these topics. They will analyse lessons to identify teaching that promotes school students' mathematical thinking and builds problem solving capacity and higher order thinking skills. Teacher candidates will consider research evidence related to key issues of teaching mathematics such as: the role of calculators and ICT, the role of numeracy in access to schooling and workplace success, equity, individual differences, and school student learning in particular topics. They will examine cognitive and affective characteristics of mathematics classrooms that encourage deep learning
Assessment:	There are 2 assessment tasks: A 2 hour examination due end of semester (60%) Written exercises (1600 words) due mid semester (40%). There are 2 hurdle requirements: Satisfactorily completion of weekly tasks and a mastery level pass of a basic skills test of Mathematics (including Number), set at Year 7 level. All items of assessment must be satisfactorily completed.
Prescribed Texts:	Z evenbergen, R., Dole, S., & Wright, R. J. (2004). Teaching Mathematics in Primary Schools. Allen & Unwin. 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, with respect to the topics of Space, Structure, Working Mathematically, Measurement, Chance and Data, teacher candidates will be able to: # Demonstrate mastery of the topics and their everyday applications which are relevant to primary teaching or are necessary to be personally numerate; # Demonstrate an understanding of how children construct mathematical knowledge; # Demonstrate knowledge of a range of classroom teaching techniques; # Demonstrate a knowledge of how children think and learn; # Demonstrate an ability to develop teaching activities and relate them to learning outcomes. 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; # 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):	Master of Teaching (Primary)