

**EDUC40011 Learning Area: Mathematics 4 (Adv)**

<b>Credit Points:</b>	12.50
<b>Level:</b>	4 (Undergraduate)
<b>Dates &amp; Locations:</b>	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Parkville, on-campus.
<b>Time Commitment:</b>	Contact Hours: A total of 36 hours Total Time Commitment: Not available
<b>Prerequisites:</b>	485-204 Learning Area: Mathematics 2 (Adv) or a minimum grade of H2A in 485-202 Learning Area: Mathematics 2
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	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.
<b>Contact:</b>	Education Student Centre
<b>Subject Overview:</b>	This subject deals with primary school mathematics programs and current issues in mathematics education. The focus is on Year 4-6. Students will learn to critically evaluate mathematics programs, materials and teaching methods. Alternative approaches to the teaching of mathematics across a primary school, such as the integrated curriculum, thematic instruction, interdisciplinary curriculum and other current curricular models will be discussed and compared. A range of methods of assessment and reporting will be examined. Contemporary national and international curriculum documents will provide a focus for the discussion of primary mathematics and associated issues. Important issues for the design of the school curriculum, such as fundamental goals of school mathematics, equity issues, the changing nature of appropriate curriculum content, teaching and learning styles will be examined in the context of a study of international and statewide comparisons of mathematical achievement. Students will develop a mathematics program for use in upper primary mathematics classrooms.
<b>Objectives:</b>	On completion of this subject students should be able to: <ul style="list-style-type: none"> <li># Critically evaluate mathematics programs, materials and teaching methods;</li> <li># Demonstrate understanding of alternative approaches to the teaching of mathematics across a primary school;</li> <li># Compare, identify and apply current curricular models;</li> <li># Demonstrate understanding of a range of methods of assessment and reporting;</li> <li># Discuss primary mathematics and associated issues in the light of contemporary national and international curriculum documents;</li> <li># Demonstrate understanding of a range of important issues in the school curriculum in the context of a study of international and statewide comparisons of mathematics achievement;</li> <li># Demonstrate an ability to develop a mathematics program for use in primary school classrooms.</li> </ul>
<b>Assessment:</b>	There are three assessment tasks due throughout the semester:An issues paper dealing with teaching and learning in upper primary mathematics classrooms Yrs 4 - 6 (1,000 words 15 per cent)A unit planning assignment Yrs 4 -6 (1,000 words 35 per cent)One 2 hour examination in the official examination period (50 per cent)
<b>Prescribed Texts:</b>	Booker, G., Bond, D., Sparrow, L., & Swan, P. (2009) Teaching Primary Mathematics (4th ed.). French's Forrest: Pearson

<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>On completion of this subject students will have the knowledge and skills and understanding to enable them to:</p> <ul style="list-style-type: none"><li># Be skilled communicators who can effectively articulate and justify their practices as knowledgeable agents of change;</li><li># Be flexible and able to adapt to change through knowing how to learn;</li><li># Understand the significance of developing their practice on the basis of research evidence;</li><li># Work in teams with skills in co-operation, communication and negotiation;</li><li># Be independent of mind, responsible, resilient and self-regulating;</li><li># Have a conscious personal and social values base.</li></ul>
<b>Related Course(s):</b>	Bachelor of Education (Primary)