EDUC90458 Learning Area Mathematics 2

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 170 hours
Prerequisites:	You must have successfully completed the following subject/s prior to enrolling in this subject

Subject	Study Period Commencement:	Credit Points:
EDUC90457 Learning Area Mathematics 1	February	12.50

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None

Subject	Study Period Commencement:	Credit Points:
EDUC90426 Foundations of Mathematics Teaching	Semester 2	12.50

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:	Dr Caroline Bardini
Contact:	**Contact Us (https://enquiry.app.unimelb.edu.au/?cc=MGSE-ALL&fn=MGSE)** Call: 13 MELB (13 6352)
Subject Overview:	This subject will focus on the teaching of senior secondary mathematics in Victoria, and consider key issues in mathematics education which are relevant to the post-compulsory years. Teacher candidates will develop pedagogical content knowledge for the effective teaching and learning of years 11-12 mathematics. They will consider the provision of mathematics and numeracy for all school students, including in vocational education and postcompulsory education. Teacher candidates will consider curriculum resources for senior secondary mathematics, assessment, use of technology, use of school and state-wide data to improve school students' learning, and the provision of a balanced curriculum incorporating concepts, skills, applications, modelling and problem solving. Proficiency Strands: Understanding, Fluency, Problem Solving, Reasoning. Teacher candidates will consider research evidence related to key issues of teaching mathematics such as: the role of technology, equity, individual differences, school student learning in particular topics, the need for computational fluency, the role of statistical literacy.
Learning Outcomes:	On completion of this subject, teacher candidates will be able to:

	# demonstrate pedagogical content knowledge for teaching years 11-12 mathematics; # demonstrate knowledge of the years 11-12 mathematics curriculum; # demonstrate knowledge of issues and research related to mathematics education; # use resources, including technology, effectively in mathematics teaching; # use school and state-wide data to inform teaching practices; # demonstrate knowledge of assessment practices at years 11-12. The subject covers a range of the National Professional Standards for Teachers (for Graduate Teachers). In particular, the subject will contribute to students attaining the following standards: 1.2 Understand how students learn 1.5 Differentiate teaching to meet the specific learning needs of students across the full range of abilities 2.1 Content and teaching strategies of the teaching area 2.2 Content selection and organisation 2.3 Curriculum, assessment and reporting 2.6 Information and Communication Technology (ICT) 3.3 Use teaching strategie 3.4 Select and use resources 5.1 Assess student learning 5.3 Make consistent and comparable judgements 5.4 Interpret student data
Assessment:	There are 2 assessment tasks: Lesson plan and pedagogical analysis, for year 11-12 mathematics (2000 words equivalent) due mid semester (50%) A report on a key issue in teaching year 11-12 mathematics (2000 words) due end semester (50%) There is 1 hurdle requirement: Completion of 12 weekly tasks. 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.
Prescribed Texts:	None
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; # 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 (Secondary) Master of Teaching (Secondary)