EDUC90434 Learning Area Chemistry 2

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: July, Parkville - Taught on campus. Parkville, On Campus
Time Commitment:	Contact Hours: 36 hours. Total Time Commitment: 125 hours. 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:
EDUC90433 Learning Area Chemistry 1	February	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:	Mr Mark Learmonth
Contact:	Education Student Centre
Subject Overview:	This subject explores the rationale, methodology and teaching techniques relevant to the teaching of VCE Chemistry, with a special emphasis on Units 2 and 4 of the VCE study. Some of the general teaching techniques of Chemistry are also emphasized in junior science, including laboratory work, demonstrations and safety in the use of chemicals and equipment, In this subject, we focus on quantitative Chemistry, the various types of chemical calculations, definitional problems, chemical equation-writing and actual measured quantities in practical activities. Another detailed focus will be on assessment in Chemistry, both as prescribed by VCAA, and informal and alternate assessment opportunities. In combined science, shared with the other science methods, teacher candidates will employ in practice research on children's naïve conceptions in middle years science topics, and develop skills in managing communication in peer based learning. Workshops and excursions will explore learning theories and practice relating to teaching middle years Science. ICT is treated as an integral part of contemporary science teaching practice, where appropriate it is used to support and enhance conceptual understanding and teaching practice
Objectives:	On completion of this subject, teacher candidates will be able to: # Show theoretical frameworks and practical ability to produce effective learning for a wide range of school students, including in junior science; # Display a solid knowledge of Chemistry, and educational contexts and how they interact in effective pedagogy; # Understand the links between effective planning teaching and evaluation in Chemistry; # Use a variety of technologies in the classroom to assist learning in Chemistry classes;

	# Apply chemical understandings to familiar and new contexts; # Analyse issues and implications relating to scientific and technological developments and analyse and evaluate the reliability of information and opinions presented in the public domain; # Demonstrate the knowledge, skills and abilities to use ICT to support student learning and professional practice.
Assessment:	There are 3 assessment tasks for this subject. Chemistry demonstration (1350 words) due mid semester (33%) Chemistry teaching program (1350 words) due late semester (33%)EITHER Scaffolding for student talk (due mid semester) OR Focus on inquiry in the science classroom (due end of semester) equivalent of 1300 words (34%)NOTE: Teacher candidates doing 1 LA science subject will submit the Scaffolding for student talk assignment while those doing 2 LA science subjects will submit both assessment tasks listed in dot point 3, completing one in each of their LA Science subjects.
Prescribed Texts:	VCAA(2006) Victorian Essential Learning Standards VCAA, VCE Chemistry Study Design, VCAA, 2005
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 change # 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)