460-564 Learning Area Chemistry 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
Prerequisites:	460-563 Learning Area Chemistry 1
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:	Mark Learmonth
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 different Years 7 – 10 science topics, and develop skills in managing communication in peer based learning. Workshops and excursions will strengthen particular content areas. School visits will introduce models of department management and associated career options.
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 a report on peer-based teaching OR a set of workshop productions (equivalent to 1300 words) due end of semester (34%) NOTE: Teacher candidates doing one LAS Science subject will do one of these tasks. Teacher candidates doing 2 LAS Science subjects will do both, one in each of their LAS 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 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. 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)