EDUC90470 Learning Area Physics 2

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: July, Parkville - Taught on campus. Parkville
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 125 hours total commitment. 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:
EDUC90469 Learning Area Physics 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:	Dr Pam Mulhall
Contact:	Education Student Centre
Subject Overview:	This subject prepares teacher candidates for the teaching of secondary school physics, especially VCE Physics Units 2 and 4. Pedagogical methods and learning and teaching approaches appropriate to physics are covered. These include the use of classroom instruction, practical laboratory work, and the use of Information and Communication Technology. The subject also explores assessment of physics. In addition, some coverage is devoted to physics as outlined in the Victorian Essential Learning Standards for years 7-10, the International Baccalaureate curriculum, and specific areas of the VCE course unlikely to be familiar to teacher candidates. 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.
Objectives:	On completion of this subject, teacher candidates will be able to:; # Be skilled teachers of physics with the theoretical frameworks and practical ability to produce effective learning for a wide range of students, including in junior science; # Display a solid current knowledge of the physical sciences, educational contexts and how they interact in effective pedagogy; # Understand the links between effective planning teaching and evaluation in physics; # Use a variety of technologies in the classroom to assist learning in physics classes; # Apply physics 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.

Assessment:	There are 3 assessment tasks for this subject. * A task related to the use of practical work in VCE Physics (1400 words) (35%) due mid-semester * A task related to assessment in VCE Physics (1300 words) (32%) due end of semester * EITHER Scaffolding for student talk due mid-semester OR Focus on inquiry in the science classroom (equivalent to 1300 words) due end of semester (33%)NOTE: Teacher candidates doing one 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 (2005) VCE Physics Study Design. VCAA (2006) Victorian Essential Learning Standards 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, 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.
Links to further information:	www.education.unimelb.edu.au
Related Course(s):	Master of Teaching (Secondary) Master of Teaching (Secondary)