625-332 Climate: Mechanisms & Variability

Credit Points:	25.000
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: 36 lectures (three per week) and 36 hours of practical work (three hours per week) Total Time Commitment: 120 hours
Prerequisites:	Earth sciences 625-227, 625-228; mathematics 620-141, 620-142, 620-143 or equivalent.Earth sciences 625-331 is recommended.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
Coordinator:	Professor I H Simmonds
Subject Overview:	Topics include the global climate as a holistic system; convection, radiation and cloud processes; remote sensing of the climate system; climate variability on various time scales, climate shifts and global warming; El NiÃ±o-Southern Oscillation in the historic period and relationships with longer time-scale variability; and the role of ice-sheets, Antarctic mass balance and large-scale water mass formation. On completion of this subject, students should have an understanding of the workings and connectedness of the climate system as a whole, and of climate variability.
Assessment:	Weekly written reports of practical work of up to 500 words each during semester (35%); written assignments totalling up to 3000 words due during semester (10%); a 3-hour written examination in the examination period (55%).
Prescribed Texts:	None
Breadth Options:	This subject is a level 2 or level 3 subject and is not available to new generation degree students as a breadth option in 2008. This subject or an equivalent will be available as breadth in the future. Breadth subjects are currently being developed and these existing subject details can be used as guide to the type of options that might be available. 2009 subjects to be offered as breadth will be finalised before re-enrolment for 2009 starts in early October.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Notes:	Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.
Related Course(s):	Bachelor of Arts and Bachelor of Science Bachelor of Arts and Sciences Bachelor of Science