

625-331 Atmosphere-Ocean Interaction

Credit Points:	25.000
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 36 lectures (three per week) and 60 hours of practical work (five hours per week) Total Time Commitment: 120 hours
Prerequisites:	Earth sciences 625-227, 625-228; mathematics 620-141, 620-142, 620-143 or equivalent. At least one of mathematics 620-231 and 620-232 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:	<p>Topics include circulation of the atmosphere and ocean and how they interact to influence weather and climate; El Niño-Southern Oscillation events, atmospheric and oceanic processes in the Antarctic region; the general circulation, Sverdrup transport, wind-driven ocean circulation; atmospheric and oceanic wave processes and instabilities, generation of eddies and 'weather'; turbulent structure of the ocean and atmosphere, the surface and boundary layers, Ekman flows; and air-sea interaction, exchanges of heat, moisture and momentum at the interface.</p> <p>On completion of this subject, students should have an appreciation of atmospheric and oceanic motion and interactions on a range of time and spatial scales and their importance for climate.</p>
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:	<p>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.</p> <p>This subject or an equivalent will be available as breadth in the future.</p> <p>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.</p> <p>2009 subjects to be offered as breadth will be finalised before re-enrolment for 2009 starts in early October.</p>
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