625-333 Atmosphere Ocean Interaction

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: Two 1-hour lectures per week; one 2-hour practical class per week. Total 48 hours. Total Time Commitment: 120 hours total time commitment.
Prerequisites:	*Dynamical Meteorology and Oceanography*
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	625-331 Atmosphere-Ocean Interaction (prior to 2009).
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:	Assoc Prof Kevin Walsh
Subject Overview:	This subject gives an overview of the interaction between the ocean and the atmosphere on a wide range of time and space scales. Topics include the planetary boundary layers in the ocean and the atmosphere, momentum and heat exchanges, the hydrologic cycle, sea ice and its modulation of air-sea interaction, ocean wave theory including wind-waves, Kelvin and Rossby waves, ENSO theory, tidal theory, the effects of air-sea interaction on the dynamics of tropical cyclones.
Objectives:	The objectives of this subject are to develop a quantitative understanding of the influence of air-sea interaction on weather and climate systems.
Assessment:	Four problem sets during semester (totalling 2000 words) (40%); a 2-hour written examination in the examination period (60%). (The problem sheets will be set at approximately equal intervals during semester and three weeks will be allowed for their completion.)
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2009/D09)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject students should have developed the following generic skills: an ability to perform complex calculations relevant to the development of a physical understanding of the atmosphere and ocean

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 Majors/Minors/ Specialisations:	Atmosphere and Ocean Sciences