ATOC20001 Weather and Climate Systems

Credit Points:	12.5
Level:	2 (Undergraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 2 x one hour lectures per week; 1 x two hour practical class per week; 1 day of field work on one weekend. Some practical work may take place at times decided by the students Total Time Commitment: Estimated total time commitment of 170 hours
Prerequisites:	Students are required to have a knowledge of single variable calculus: # >=25 in VCE Unit 3/4 Mathematical Methods or Specialist Mathematics (or equivalent); or # 12.5 points in level 1 tertiary level mathematics (or equivalent)
Corequisites:	None
Recommended Background Knowledge:	**Subject** | **Study Period Commencement:** | **Credit Points:** EVSC10001 The Global Environment | Semester 1 | 12.5 Some knowledge of physics would be an advantage
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 Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Assoc Prof Kevin Walsh
Contact:	**Email: kevin.walsh@unimelb.edu.au (mailto:kevin.walsh@unimelb.edu.au)**
Subject Overview:	This subject deals with weather systems ranging from global to human scales; the general circulation of the ocean and atmosphere; mesoscale systems and severe local weather; mid-latitude systems: extra-tropical cyclones and anti-cyclones; and low latitude systems: subtropical and tropical cyclones, heat lows and monsoons.
Learning Outcomes:	On completion of this subject, students will have learnt to: # describe the drivers of the Earth's weather systems over spatial scales ranging from local to global # analyse the interactions of atmospheric phenomena at various scales # interpret standard Bureau of Meteorology products # describe and implement observational techniques for measuring weather
Assessment:	Practical work/problem sheets, including a field trip report, totalling not more than 3500 words due during the semester (50%); a 2-hour written examination in the examination period (50%).
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/2016/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/B-MUS)** 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:	Students who successfully complete this subject will: # demonstrate a high level of achievement in writing and problem-solving # apply analytical, quantitative and technical skills to problem solving # reflect and critique information as life-long learners # demonstrate excellent organisational, planning and time management skills # apply knowledge, skills and attitude to adapt to scientific, technological and social changes # examine critically, synthesise and evaluate knowledge across a broad range of disciplines
Notes:	This subject is available for science credit to students enrolled in the BSc (both pre-2008 and new degrees), BASc or a combined BSc course.
Related Majors/Minors/ Specialisations:	Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED