ECOL20003 Ecology

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 2 x one hour lectures per week; 1 x three hour practical class per week; one full day excursion during the semester. Total Time Commitment: Estimated total time commitment of 120 hours
Prerequisites:	One of # **650-141 Biology of Cells and Organisms (/view/2010/650-141)** # **650-142 Genetics & the Evolution of Life (/view/2010/650-142)** # **650-111 Biology of Australian Flora & Fauna (/view/2010/650-111)** # **880-101 Natural Environments (/view/2010/880-101)** Or equivalent.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Students who have received credit for either of the following may not enrol in this subject for credit. # 654-204 Ecology: Individuals and Populations (prior to 2009) # 606-204 Ecology: Communities and Ecosystems (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. This subject requires all students to actively and safely participate in laboratory and field activities. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
Coordinator:	Dr Graeme Coulson, Dr Peter Vesk, Prof Barbara Downes
Contact:	Email: 654219@zoology.unimelb.edu.au
Subject Overview:	This subject introduces students to four major ecological questions that can be addressed at the levels of individuals, populations, communities and ecosystems. Making use of aquatic and terrestrial examples, topics include organisms and the physical environment, life histories, population growth and regulation, managing populations, theoretical models, species interactions, community change and energy flows. The practical component will emphasise approaches to the collection and analysis of ecological data, and how to interpret and write scientific papers.
Objectives:	Upon completion of this subject students should have an appreciation of four major questions in ecology and the ways in which they can be addressed: What determines the distribution of individuals of a species? What controls the abundance of populations of a species? What determines the richness and diversity of species in a community? What governs the turnover of matter and energy in an ecosystem?

Assessment:	A written practical report totalling up to 10 pages due during the semester (30%); ongoing assessment of practical exercises and laboratory problems during the semester (25%); a 2-hour written examination during the examination period (45%).
Prescribed Texts:	C R Townsend et al, Essentials of Ecology, 3rd Ed. Blackwell, 2008
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/2010/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2010/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2010/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2010/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:	This subject should develop generic skills in: reading, assimilating and writing about scientific information; working in small groups; asking realistic scientific questions; and collecting analysing and interpreting scientific data.
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 Course(s):	Bachelor of Science
Related Majors/Minors/ Specialisations:	Environmental Geographies, Politics and Cultures Environmental Science Geography Geography Major Landscape Management Physical (Environmental Engineering) Systems