650-141 Biology of Cells and Organisms

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus. Lectures, tutorials and computer workshops
Time Commitment:	Contact Hours: 36 one-hour lectures (three per week), 30 hours of practical activities, pre-laboratory activities and computer workshops (independent learning tasks), averaging 3 hours per week and 10 one-hour tutorial/workshop sessions. Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Credit cannot be gained for this subject and 600-141 (before 2004), 600-131 (before 2004), 650-131 or 202-103.
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 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:	Associate Professor Dawn Gleeson
Subject Overview:	Structure and function of multicellular organisms including cell function, systems involved in energy transformations, nutrition, water uptake, excretion, gas exchange, circulation, and immune responses; plant and animal reproduction and development; mechanisms involved in responsiveness and coordination: hormonal control in plants and animals, and nervous systems in animals; and animal movement and behaviour.
Assessment:	A 40-minute, on-line multiple choice test held mid-semester (10%); work in practical classes during the semester, made up of written work not exceeding 1500 words, assessment of practical skills within the practical class, and no more than 4 short multiple choice tests (25%), completion of 4 independent learning tasks throughout the semester (5%); a 3-hour written examination on theory and practical work in the examination period (60%). A pass in the practical work is necessary to pass the subject.
Prescribed Texts:	Biology, An Australian Focus (RB Knox, PY Ladiges, BK Evans and R Saint), 3rd edn, McGraw-Hill, 2004.
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # Bachelor of Arts # Bachelor of Commerce # Bachelor of Environments # Bachelor of Music 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:	At the completion of this subject, students should:

	# have a knowledge of the basic processes of life; # be familiar with the structure and function of both prokaryotic and eukaryotic cells; # understand the structure and function of organisms, and how these features contribute to the overall functioning of organisms; # understand the mechanisms of plant and animal reproduction and development; # be able to complete basic manipulations with laboratory equipment, in particular the use of microscopes; and # develop skills in recording observations, analysis and interpretation of data, and dissection techniques.
Notes:	Students enrolled in the BSc (both pre-2008 and new degrees), BASc or a combined BSc course will receive science credit for the completion of this subject. Experiments involving the use of animals are an essential part of this subject; exemption from these experiments is not possible. This is a joint botany and zoology subject. Students are expected to enrol in both biology 650-141 and 650-142.
Related Course(s):	Bachelor of Agriculture Bachelor of Arts Bachelor of Optometry Bachelor of Veterinary Science(PV) Diploma in Arts (Environmental Studies)