536-235 Research-Based Physiology

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus. Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: one x 1 hour lecture and one x 3 hour practical per week Total Time Commitment: 48 contact hours with an estimated total time commitment of 96 hours (including non-contact time)
Prerequisites:	2 semesters of 1st year Biology and 1 semester of any 1st year quantitative science subject eg: Chemistry, physics, maths, psychology
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	BIOM20002 Integrated Human Structure & Function
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:	Ms Arianne Dantas
Subject Overview:	Students will undertake a research project completed over several weeks, which will require them to identify a physiological problem, formulate a suitable hypothesis, select and test suitable techniques, design appropriate experimental protocols to test their hypothesis, collect and analyse their data, and write a scientific report on their findings. The aim is the prepare students for critical analysis and writing of research-based literature reviews and scientific reports in their future studies and career. it also aims to develop research skills for an enquiring graduate and investigative skills for lifelong learning. The lectures will incorporate active interaction between students and lecturers using personal response system (PRS) clickers to answer questions during lectures.
Objectives:	This subject is very skills-orientated. Development of critical thinking, problem solving and research skills, including devising experimental physiological methods, data collection, recording and analysis, interpreting and discussing data, writing clear and concise reports, and developing physiological laboratory practices (including safety, ethics) and skills (in tissues or whole organisms) are integral to the subject. Group skills include working collaboratively, group communication and information presentation.
Assessment:	Written reports of up to 1500 words each due during the semester (20%); class participation during the semester (5%); Effective PRS participation and contributions (5%), a written report on a research project of up to 2000 words due during semester (30%): ongoing assessment of e-Learning activities(10%): a 2-hour written examination in the examination period (30%)
Prescribed Texts:	Silverthorn, D.U, Human Physiology: An Integrated Approach 4th Ed, 2007 - Prentice Hall
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:	Critical thinking, creative thinking, self-managed learning, adaptability, problem solving, communication skills, interpersonal skills, group work and computer literacy.
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. This subject is not available to Bachelor of Biomedicine students. Students undertaking this subject will be expected to regularly access an internet-enabled computer.