

PHYS30009 Experimental Physiology

Credit Points:	12.5															
Level:	3 (Undergraduate)															
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. An enrolment quota of 30 per semester applies to this subject. For detailed information on the quota subject application process, refer to the Quota Subject link on the MDHS Student Centre website: http://sc.mdhs.unimelb.edu.au/quota-subjects															
Time Commitment:	Contact Hours: One x 3 hour workshop per week plus 2-3 hours per week of independent group work tasks Total Time Commitment: 36 contact hours with an estimated total time commitment of 170 hours															
Prerequisites:	<p>B. Science</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PHYS20008 Human Physiology</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>PHYS20009 Research-Based Physiology</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>B. Biomedicine</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BIOM20002 Human Structure and Function</td> <td>Semester 2</td> <td>25</td> </tr> </tbody> </table> <p>B.Science (Prior to 2009) 536-201 Principles of Physiology and 536-211 Physiology: Control of Body Function and 536-222 Experimental Physiology</p>	Subject	Study Period Commencement:	Credit Points:	PHYS20008 Human Physiology	Semester 1, Semester 2	12.50	PHYS20009 Research-Based Physiology	Semester 1, Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	BIOM20002 Human Structure and Function	Semester 2	25
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Corequisites:	None															
Recommended Background Knowledge:	A fundamental understanding of human physiology and experimental design as provided by the prerequisites.															
Non Allowed Subjects:	None															
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>															
Coordinator:	Dr Charles Sevigny, Ms Arianne Dantas															
Contact:	<p>Academic Coordinator Dr Charles Sevigny sevignyc@unimelb.edu.au (mailto:sevignyc@unimelb.edu.au) Ms Arianne Dantas</p>															

	<p>a.dantas@unimelb.edu.au (mailto:a.dantas@unimelb.edu.au) Administrative Coordinator Ms Lesley Robinson BiomedSci-AcademicServices@unimelb.edu.au (mailto:BiomedSci-AcademicServices@unimelb.edu.au)</p>
Subject Overview:	<p>This subject is designed for students interested in becoming career researchers. Students will work in groups of 10-12 individuals. Each group will select one project from a list of available research questions, research appropriate background information, formulate hypotheses/ aims, design an experiment to test those hypotheses/aims, carry out the experiment over a 4 week experimental period, and ultimately write up their findings in the format of a peer-reviewed journal article. This subject will allow more independence in conceptualisation and execution of the research questions than the second-year subject <i>Research-Based Physiology (PHYS20009)</i>.</p>
Learning Outcomes:	<p>The primary objective of this subject is to provide an advanced third-year Physiology practical experience for students, building on and reinforcing the skills acquired from <i>Research-Based Physiology</i> in second-year. Students will need to work in a team to design and execute experiments with minimal guiding feedback from the subject coordinator. At the end of semester, students should have developed a clear and independent understanding of experimental design, and how to develop experiments to investigate a specific research question. Students should also develop an understanding of the limitations based on the availability of equipment and time constraints. In addition, a different group member will have the opportunity to present a relevant journal article to their group and act as "team leader" each week.</p>
Assessment:	<p>10 minute presentation of a journal article (during semester) 10% Progress updates and online submissions (group task; during semester) 20% Academic assessed participation (5%) and peer-reviewed participation (5%) (ongoing) 10% Final written report of approximately 2000 words (end of semester exam period) 60%</p>
Prescribed Texts:	None
Recommended Texts:	Silverthorn, D.U., Human Physiology: An Integrated Approach 6th Ed., 2012 – Pearson
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Related Majors/Minors/Specialisations:	Physiology Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED