

# PHYS90008 Advanced Seminars in Physiology

| <b>Credit Points:</b>                         | 12.50  |                |                            |                |   |            |       |
|---|--|----------------|----------------------------|----------------|---|------------|-------|
| <b>Level:</b>                                 | 9 (Graduate/Postgraduate)  |                |                            |                |   |            |       |
| <b>Dates &amp; Locations:</b>                 | 2012, Parkville<br>This subject commences in the following study period/s:<br>Semester 1, Parkville - Taught on campus.  |                |                            |                |   |            |       |
| <b>Time Commitment:</b>                       | Contact Hours: 30 Total Time Commitment: 120 hours   |                |                            |                |   |            |       |
| <b>Prerequisites:</b>                         | Students must be enrolled in the Bachelor of Biomedicine (Honours), Bachelor of Science (Honours) or Master of Science to complete this subject. <table border="1" data-bbox="387 573 1485 719"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BIOM40001 Introduction To Biomedical Research</td> <td>February</td> <td>12.50</td> </tr> </tbody> </table>   | Subject        | Study Period Commencement: | Credit Points: | BIOM40001 Introduction To Biomedical Research | February   | 12.50 |
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| <b>Corequisites:</b>                          | <table border="1" data-bbox="387 745 1485 891"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PHYS40005 Physiology Research Project</td> <td>Semester 1</td> <td>25</td> </tr> </tbody> </table>   | Subject        | Study Period Commencement: | Credit Points: | PHYS40005 Physiology Research Project         | Semester 1 | 25    |
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| PHYS40005 Physiology Research Project         | Semester 1   | 25             |                            |                |   |            |       |
| <b>Recommended Background Knowledge:</b>      | Undergraduate 3 year sequence in relevant experimental science discipline.   |                |                            |                |   |            |       |
| <b>Non Allowed Subjects:</b>                  | None   |                |                            |                |   |            |       |
| <b>Core Participation Requirements:</b>       | 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 Overview, Objectives, Assessment and Generic Skills sections of this entry. 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 will impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and the Disability Liaison Unit: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>  |                |                            |                |   |            |       |
| <b>Coordinator:</b>                           | Dr Rene Koopman  |                |                            |                |   |            |       |
| <b>Contact:</b>                               | Academic Coordinator:<br>Associate Professor Graham Barrett<br><a href="mailto:grahamlb@unimelb.edu.au">grahamlb@unimelb.edu.au</a> ( <a href="mailto:grahamlb@unimelb.edu.au">mailto:grahamlb@unimelb.edu.au</a> )<br>Administrative Coordinator:<br>Ms Lesley Robinson<br><a href="mailto:lesleyr@unimelb.edu.au">lesleyr@unimelb.edu.au</a> ( <a href="mailto:lesleyr@unimelb.edu.au">mailto:lesleyr@unimelb.edu.au</a> )   |                |                            |                |   |            |       |
| <b>Subject Overview:</b>                      | This subject uses Research Seminars as a vehicle to teach students the experimental approach to contemporary physiological questions. The seminars will be presented by a mixture of Physiology Department faculty, invited speakers from outside the department, and postgraduate students. The seminars will be chosen to cover each of the three main research areas of the department; Cardiovascular Physiology, Neurophysiology, and Muscle and Exercise Physiology. Students will engage with a diverse range of physiological questions and the experimental strategies used to address them. Students will learn to critique seminars and to focus on the scientific essentials, i.e. what question is being addressed? What led up to this question? What strategies are being used to answer the question, and how well have they succeeded? Three seminars will receive particular attention. Questions and recommended reading, set by the speaker, will be distributed several days in advance, to assist the student to start thinking along helpful lines before each of these three seminars. After attending each of these seminars, |                |                            |                |   |            |       |

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|   | students will participate in workshops in which directed questions and structured discussion will be used to engage students further with the scientific issues arising from the seminars.  |
| <b>Objectives:</b>                            | To develop student awareness and knowledge of how contemporary physiological questions are addressed in a broad range of sub-disciplines; To cultivate an appreciation and understanding of the major sub-disciplines of physiological research; To increase students' knowledge of the experimental approaches and strategies used in different areas of physiology, and to think of ways that these could be applied to their own research projects; To teach students to think critically about the limitations and weaknesses that are associated with virtually all experimental strategies; To encourage students to conceptualize their own experimental strategies and approaches to physiological questions. |
| <b>Assessment:</b>                            | 75% of assessment is from written assignments (three 1500-2000 word assignments submitted during semester, each worth 25%). 15% of the assessment is from workshop presentations. 10% of assessment is attendance at the weekly seminars.   |
| <b>Prescribed Texts:</b>                      | No specific text. Recommended reading will be given with the pre-seminar questions for the three seminars used for assignments.   |
| <b>Breadth Options:</b>                       | This subject is not available as a breadth subject.   |
| <b>Fees Information:</b>                      | Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>   |
| <b>Generic Skills:</b>                        | Analysing complex scientific issues.<br>Identifying critical and essential factors from a large body of information<br>Making a constructive critique of a scientific presentation<br>Performing written and oral communication skills at a high standard.<br>Contributing to intellectual discussion<br>Generating new ideas for scientific experiments  |
| <b>Links to further information:</b>          | <a href="http://www.physiology.unimelb.edu.au/">http://www.physiology.unimelb.edu.au/</a>   |
| <b>Notes:</b>                                 |   |
| <b>Related Course(s):</b>                     | Master of Science (Zoology)   |
| <b>Related Majors/Minors/Specialisations:</b> | Honours Program - Zoology<br>Physiology<br>Physiology   |