

Physiology

Year and Campus:	2010																																						
Coordinator:	Professor David Williams Department of Physiology																																						
Contact:	d.williams@unimelb.edu.au																																						
Overview:	<p>The Physiology major will teach you how the body works. You will learn about the ways in which cells, organs and the whole body function in an integrated way. By understanding normal function, you will investigate disturbances in whole body systems such as those relating to the endocrine, cardiovascular, musculoskeletal, developmental and neural control systems. The experimental bases of physiology are emphasized and you will use contemporary techniques to examine questions in physiology. Discoveries in physiology have a broad impact upon health and medicine, environmental science, industry, nutrition, exercise and reproductive biology. Many of the discoveries from the human genome project rely on physiology to understand their impact on the human body.</p>																																						
Objectives:	<p>Students completing this major should have:</p> <ul style="list-style-type: none"> # understood how the functional properties of cells and tissues determine the integrated responses of human organ systems including musculoskeletal, cardiovascular, nervous and reproductive systems; # developed an understanding of the process of designing and conducting biomedical research, including the generation of experimental hypotheses, and analysis and interpretation of data derived from experiments; # gained experience in the critical evaluation and appreciation of the scientific literature; and # learned how physiology is able to provide functional and "real life" significance to on-going discoveries of genetic and molecular biological research. 																																						
Structure & Available Subjects:	Completion of 50 points of study at third year level																																						
Subject Options:	<p>Core subject</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PHYS30008 Frontiers in Physiology</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus at least one of</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PHYS30001 Cardiovascular Health: Genes & Hormones</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>NEUR30002 Neurophysiology: Neurons and Circuits</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>PHYS30005 Muscle and Exercise Physiology</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus (if required to make up 50 points) electives selected from</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BIOL30001 Reproduction</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ANAT30007 Human Locomotor Systems</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>ANAT30008 Viscera and Visceral Systems</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>NEUR30003 Principles of Neuroscience</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>NEUR30004 Sensation Movement and Complex Functions</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>An elective may also be selected from the range of biomedical science subjects (requires approval of the major coordinator)</p>			Subject	Study Period Commencement:	Credit Points:	PHYS30008 Frontiers in Physiology	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	PHYS30001 Cardiovascular Health: Genes & Hormones	Semester 1	12.50	NEUR30002 Neurophysiology: Neurons and Circuits	Semester 1	12.50	PHYS30005 Muscle and Exercise Physiology	Semester 1	12.50	Subject	Study Period Commencement:	Credit Points:	BIOL30001 Reproduction	Semester 2	12.50	ANAT30007 Human Locomotor Systems	Semester 1	12.50	ANAT30008 Viscera and Visceral Systems	Semester 2	12.50	NEUR30003 Principles of Neuroscience	Semester 1	12.50	NEUR30004 Sensation Movement and Complex Functions	Semester 2	12.50
Subject	Study Period Commencement:	Credit Points:																																					
PHYS30008 Frontiers in Physiology	Semester 2	12.50																																					
Subject	Study Period Commencement:	Credit Points:																																					
PHYS30001 Cardiovascular Health: Genes & Hormones	Semester 1	12.50																																					
NEUR30002 Neurophysiology: Neurons and Circuits	Semester 1	12.50																																					
PHYS30005 Muscle and Exercise Physiology	Semester 1	12.50																																					
Subject	Study Period Commencement:	Credit Points:																																					
BIOL30001 Reproduction	Semester 2	12.50																																					
ANAT30007 Human Locomotor Systems	Semester 1	12.50																																					
ANAT30008 Viscera and Visceral Systems	Semester 2	12.50																																					
NEUR30003 Principles of Neuroscience	Semester 1	12.50																																					
NEUR30004 Sensation Movement and Complex Functions	Semester 2	12.50																																					

Related Course(s):	Bachelor of Science
---------------------------	---------------------