

Pathology

Year and Campus:	2015																					
Coordinator:	Dr Vicki Lawson Department of Pathology																					
Contact:	Email: v.lawson@unimelb.edu.au (mailto:v.lawson@unimelb.edu.au)																					
Overview:	<p>Pathology is the scientific study of the nature of disease and its causes, processes, development, and consequences. It is a branch of science where factors which influence the shift from normal to abnormal and back again are studied at every level from the whole organism to the molecule. Therefore it overlaps with a range of biomedical disciplines such as anatomy, cell biology, biochemistry and molecular biology, microbiology and immunology and genetics. The study of Pathology will provide students with background knowledge which will enable them to ask fundamental questions about the response of tissues and cells to injury, mechanisms of healing and the outcomes which may occur when healing is unsuccessful. Students who complete a Pathology major will study findings emerging from research laboratories which are currently investigating some of the most common and intractable diseases in our community e.g. cardiovascular disease, autoimmune disease, neurodegenerative disease and cancer. A Pathology major will also give students the opportunity to experience working in a team on an investigative project and enable them to develop both verbal and written communication skills.</p>																					
Learning Outcomes:	<p>Students completing this major should:</p> <ul style="list-style-type: none"> # study factors which influence changes from normal to abnormal structure and function at every level from organism to molecule. # learn to ask fundamental questions about the response of tissues and cells to injury and the outcomes of these responses. # develop a scientific understanding of the nature of disease and its causes, processes, development, and consequences. # study findings emerging from research laboratories which are currently investigating some of the most common and intractable diseases in our community eg. cardiovascular disease, autoimmune disease, neurodegenerative disease and cancer. # experience working in a team on a project which investigates disease. # learn to critically analyse data, both their own and from Scientific Literature. # develop both verbal and written communication skills. 																					
Structure & Available Subjects:	Completion of 50 points of study at Level 3.																					
Subject Options:	<p>All three of</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PATH30001 Mechanisms of Human Disease</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>PATH30002 Techniques for Investigation of Disease</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>PATH30003 Frontiers in Human Disease</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus 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>PATH30004 Advanced Investigation of Human Disease</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>BIOM30003 Biomedical Science Research Project</td> <td>Summer Term, Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>OR</p>	Subject	Study Period Commencement:	Credit Points:	PATH30001 Mechanisms of Human Disease	Semester 1	12.50	PATH30002 Techniques for Investigation of Disease	Semester 1	12.50	PATH30003 Frontiers in Human Disease	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	PATH30004 Advanced Investigation of Human Disease	Semester 2	12.50	BIOM30003 Biomedical Science Research Project	Summer Term, Semester 1, Semester 2	12.50
Subject	Study Period Commencement:	Credit Points:																				
PATH30001 Mechanisms of Human Disease	Semester 1	12.50																				
PATH30002 Techniques for Investigation of Disease	Semester 1	12.50																				
PATH30003 Frontiers in Human Disease	Semester 2	12.50																				
Subject	Study Period Commencement:	Credit Points:																				
PATH30004 Advanced Investigation of Human Disease	Semester 2	12.50																				
BIOM30003 Biomedical Science Research Project	Summer Term, Semester 1, Semester 2	12.50																				

	<p>Another Level 3 subject in anatomy, cell biology, biochemistry and molecular biology, genetics, microbiology and immunology, pharmacology or physiology. NB. Alternative subject options to make up this elective component of the major can also be taken, subject to the approval of the major coordinator.</p>
Notes:	<p>This major is available to new generation Bachelor of Science students (B-SCI) and Bachelor of Biomedicine students. It is also available to Bachelor of Science students who commenced prior to 2008. The published structure of this major includes subjects available in the current year. Pre-2008 Bachelor of Science students who completed one or more Level 3 science subjects towards this major prior to 2010 should contact the Science Student Centre for advice on appropriate subjects to complete this major.</p> <p>A quota has been applied to a core subject and an optional subject in this major.</p>
Related Course(s):	<p>Bachelor of Arts and Bachelor of Science Bachelor of Biomedicine Bachelor of Commerce and Bachelor of Science Bachelor of Science Bachelor of Science</p>