## PATH30003 Consequences of Human Disease

Credit Points:	12.50			
Level:	3 (Undergraduate)			
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.			
Time Commitment:	Contact Hours: 36 lectures (3 per week) Total Time Commitment: 120 hours (10 hours per week)			
Prerequisites:	B. Science students:			
	Subject	Study Period Commencement:	Credit Points:	
	PATH30001 Mechanisms of Human Disease	Semester 1	12.50	
	Subject	Study Period Commencement:	Credit Points:	
	PATH30002 Techniques for Investigation of Disease	Semester 1	12.50	
	B. Biomedicine students:			
	Subject	Study Period Commencement:	Credit Points:	
	PATH30001 Mechanisms of Human Disease	Semester 1	12.50	
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	Subject	Study Period Commencement:	Credit Points:	
	PATH30002 Techniques for Investigation of Disease	Semester 1	12.50	
	NOTE: B. Biomedicine students doing a Defence & Disease Information Booklet for additional prerequisite requirements	e major MUST consult the and choices.	e Majors	
Corequisites:	B. Science students:			
	Subject	Study Period Commencement:	Credit Points:	
	PATH30004 Advanced Investigation of Human Disease	Semester 2	12.50	
	B. Biomedicine students:			
	Subject	Study Period Commencement:	Credit Points:	
	PATH30004 Advanced Investigation of Human Disease	Semester 2	12.50	
	NOTE: B. Biomedicine students doing a Defence & Disease Information Booklet for additional corequisite requirements a	major MUST consult the and choices.	e Majors	
Recommended Background Knowledge:	None			
Non Allowed Subjects:	None			
Core Participation Requirements:	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 Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on			

	the disability support scheme can be found at the Disability Liaison Unit website: http:// www.services.unimelb.edu.au/disability/	
Coordinator:	Dr Vicki Lawson	
Contact:	Dr Vicki Lawson: <u>v.lawson@unimelb.edu.au</u> (mailto:v.lawson@unimelb.edu.au) Administrative Coordinator: <u>BiomedSci-AcademicServices@unimelb.edu.au</u> (mailto:BiomedSci-AcademicServices@unimelb.edu.au)	
Subject Overview:	Consequences of Human Disease: Following on from Mechanisms of Human Disease in Semester 1, the emphasis of this subject is to enhance the theoretical understanding of the cellular, molecular and genetic basis of disease. Students will develop an understanding of the cellular, molecular and genetic bases of disease processes taking an integrated approach which utilises current advances in research and lecturers who are experts in the main areas covered - immunopathology, neuropathology and neoplasia. The immunopathology component includes organ- and non- organ specific autoimmune diseases, transplantation, Fc receptors and inflammation, HIV- AIDS. The neuropathology component of the subject focuses on neurodegenerative diseases including Alzheimer's disease, Parkinson's disease, Multiple Sclerosis and Prion-related Diseases. Lecturers from Pathology and key cancer research institutions including the Peter MacCallum Cancer Centre and Ludwig Institute for Cancer Research cover topics including cancer diagnosis, epidemiology, tumour metastases and current approaches to radiotherapy and immunotherapy of cancer. Students will develop communication skills necessary to describe the cellular and molecular basis of complex disease processes. Students will also enhance their skills in the acquisition and evaluation of research-based data related to the lectures. From the lectures, students will understand the important relationship between basic research and the investigation of complex diseases and how research discoveries can contribute to treatment of disease. The subject will consider: # the range of ways in which response to injury in the Nervous System leads to development of neurological disease eg., Stroke, Alzheimer's Disease, Parkinson's Disease, Multiple Sclerosis and others as well as the current investigative strategies being used to understand and treat these conditions. # the mechanisms and consequences of immune-mediated tissue damage. Students will gain an understanding of how im	
Objectives:	Using experts in their field of research, this subject aims to introduce students to current theoretical and experimental concepts of the cellular, molecular and genetic bases of disease. Students will develop an understanding of complex disease processes and how this understanding can be used for the treatment and prevention of major diseases affecting human society.	
Assessment:	Two multiple choice question tests during the semester (20% each);A 3 hour written examination in the examination period (60%).	
Prescribed Texts:	Kumar V. et al., Robbins and Cotran Pathologic Basis of Disease, latest edition, Saunders Elsevier.	
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	
Generic Skills:	The emphasis of this subject is to enhance the theoretical understanding of the cellular, molecular and genetics bases of disease. Utilizing an integrated approach to teaching involving current research presented by lecturers who are experts in the areas of immunological, neurological, neoplastic and genetic diseases, students will develop communication skills necessary to describe complex disease processes. Students will also enhance their skills in the acquisition and evaluation of research-based data related to the lectures. From the lectures,	

	students will understand the important relationship between basic research and the investigation of complex diseases and how research discoveries can contribute to treatment of disease.
Notes:	<ul> <li># B. Science and B. Biomedicine students intending to take a major in Pathology are required to enrol in both PATH30001 Mechanisms of Human Disease and PATH30002 Techniques for Investigation of Disease in Semester 1 and PATH30004 Advanced Investigation of Human Disease in Semester 2.</li> <li># Students NOT doing a Pathology major can enrol in PATH30003 without doing PATH30004 as a co-requsite.</li> <li># B. Biomedicine students doing a Defence &amp; Disease major MUST consult the Majors Information Booklet for additional prerequisite and corequisite requirements and choices.</li> <li># Science students should be familiar with the content of PATH20001 Exploring Human Disease and PATH30001 Mechanisms of Human Disease; B. Biomedicine students should be familiar with the Pathology and Biochemistry components of their 200-level core subject BIOM20001 Molecular and Cellular Biomedicine.</li> <li># B. Science students must also have passes in the two 200-level Biochemistry prerequisites.</li> </ul>
Related Course(s):	Bachelor of Science
Related Majors/Minors/ Specialisations:	Biotechnology (pre-2008 Bachelor of Science) Defence and Disease Pathology Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses