

## MIIM30003 Medical and Applied Immunology

<b>Credit Points:</b>	12.5						
<b>Level:</b>	3 (Undergraduate)						
<b>Dates &amp; Locations:</b>	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.						
<b>Time Commitment:</b>	Contact Hours: 36 lectures (three per week) Total Time Commitment: 170 hours						
<b>Prerequisites:</b>	<p>Students should have passed:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MIIM30002 Principles of Immunology</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>Students who have obtained 40% – 49% for MIIM30002 Principles of Immunology are advised to discuss the possibility of being accepted into this subject with the subject coordinators.</p>	Subject	Study Period Commencement:	Credit Points:	MIIM30002 Principles of Immunology	Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:					
MIIM30002 Principles of Immunology	Semester 1	12.50					
<b>Corequisites:</b>	None						
<b>Recommended Background Knowledge:</b>	The prerequisite subjects should have provided an appropriate background for this subject.						
<b>Non Allowed Subjects:</b>	None						
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;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.&lt;/p&gt; &lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>						
<b>Coordinator:</b>	Assoc Prof Sammy Bedoui, Prof Stephen Turner						
<b>Contact:</b>	<p>Subject Coordinators Prof Stephen Turner <a href="mailto:sjturn@unimelb.edu.au">sjturn@unimelb.edu.au</a> (mailto:sjturn@unimelb.edu.au) Dr Sammy Bedoui <a href="mailto:sbedoui@unimelb.edu.au">sbedoui@unimelb.edu.au</a> (mailto:sbedoui@unimelb.edu.au) Administrative Coordinator <a href="mailto:BiomedSci-AcademicServices@unimelb.edu.au">BiomedSci-AcademicServices@unimelb.edu.au</a> (mailto:BiomedSci-AcademicServices@unimelb.edu.au)</p>						
<b>Subject Overview:</b>	The subject provides a detailed study of interactions involving both cellular and soluble factors that shape an immune response: natural and acquired immunity to bacteria, viruses and - parasites; design of vaccines; immunodeficiency, including HIV/AIDS; immunopathology of infection; autoimmunity, its aetiology, pathogenesis and treatment; and current practice and future perspectives in transplantation and tumour immunology.						
<b>Learning Outcomes:</b>	Upon completion of the subject students should be able to understand and discuss:						

	<ul style="list-style-type: none"> <li># interactions of both cellular and soluble immune factors as they relate to medical and applied aspects of immunology;</li> <li># the mechanisms of natural and acquired immunity to bacteria, viruses and parasites, and mechanisms of evasion of these responses, and how this knowledge relates to vaccine design;</li> <li># the problems of immunopathology and immunodeficiency for immunity to infection;</li> <li># the aetiology, pathogenesis and treatment of autoimmunity;</li> <li># the immunological challenges of tissue transplantation and how they are overcome; and</li> <li># the potential of immunotherapy and vaccines against cancer.</li> </ul> <p>Students should have developed skills in analysing experimental evidence for immunological concepts. They should appreciate the experimental basis of our knowledge of the immune response and how this knowledge can be extrapolated to practical applications.</p>
<b>Assessment:</b>	2 X 45 min written examinations held at around Week 5 and Week 10 of semester (2 X 20%). A 2 hour written examination held in the examination period (60%)
<b>Prescribed Texts:</b>	Janeway's Immunobiology (Murphy et al) 8th Edn, 2012
<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-ARTS">https://handbook.unimelb.edu.au/view/2015/B-ARTS</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-COM">https://handbook.unimelb.edu.au/view/2015/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-ENVS">https://handbook.unimelb.edu.au/view/2015/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-MUS">https://handbook.unimelb.edu.au/view/2015/B-MUS</a>)</li> </ul> <p>You should visit <b>learn more about breadth subjects</b> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<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>	<p>On completion of this subject, students should have developed the following generic skills</p> <ul style="list-style-type: none"> <li># the ability to interpret scientific literature and interpret data from electronic databases.</li> <li># the capacity to integrate knowledge across disciplines.</li> <li># the ability to comprehend a question, evaluate the relevant information and communicate an answer</li> </ul>
<b>Notes:</b>	Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.
<b>Related Majors/Minors/Specialisations:</b>	<p>Defence and Disease Immunology Immunology (pre-2008 Bachelor of Science) Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED</p>