

## 526-305 Medical and Applied Immunology

<b>Credit Points:</b>	12.50
<b>Level:</b>	3 (Undergraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 36 lectures (three per week) Total Time Commitment: 120 hours
<b>Prerequisites:</b>	526-304 Principles of Immunology.
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
<b>Coordinator:</b>	Assoc Prof Andrew Geoffrey Brooks, Assoc Prof Stephen John Turner
<b>Subject Overview:</b>	<p>The subject provides an in-depth study of cell interactions in the 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.</p> <p>By the end of the subject students should be able to understand and discuss:</p> <ul style="list-style-type: none"> <li># cell interactions in immunity 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 in infection;</li> <li># the aetiology, pathogenesis and treatment of autoimmunity;</li> <li># the problems of 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.</p> <p>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>	A 1-hour written examination held mid-semester (20%); a 3-hour written examination in the examination period (80%).
<b>Prescribed Texts:</b>	"Janeway's Immunobiology" (Murphy et al) 7th edn, 2008
<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/2009/D09">https://handbook.unimelb.edu.au/view/2009/D09</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2009/F04">https://handbook.unimelb.edu.au/view/2009/F04</a>)</li> </ul>

	<p># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2009/A04">https://handbook.unimelb.edu.au/view/2009/A04</a>)</p> <p># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2009/M05">https://handbook.unimelb.edu.au/view/2009/M05</a>)</p> <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>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 Course(s):</b>	Bachelor of Biomedical Science Graduate Diploma in Biotechnology
<b>Related Majors/Minors/ Specialisations:</b>	Immunology