

# MIIM30014 Medical Microbiology: Virology

<b>Credit Points:</b>	12.50																																	
<b>Level:</b>	3 (Undergraduate)																																	
<b>Dates &amp; Locations:</b>	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.																																	
<b>Time Commitment:</b>	Contact Hours: 3 x one hour lectures per week (total contact hours: 36) Total Time Commitment: 120 hours																																	
<b>Prerequisites:</b>	<p>B. Science students:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MIIM20001 Principles of Microbiology &amp; Immunology</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>MIIM20003 Experimental Microbiology</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>B. Sc. students who have taken MIIM20001, Principles in Microbiology and Immunology BUT NOT MIIM20003, Experimental Microbiology MAY be admitted to this subject after discussion with and specific permission from the subject coordinators.</p> <p>B. Biomedicine students (2009 on):</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BIOM20001 Molecular and Cellular Biomedicine</td> <td>Semester 1</td> <td>25</td> </tr> <tr> <td>MIIM20002 Microbes, Infections and Responses</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>B. Biomed. Sci. students (pre 2009):</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MIIM20001 Principles of Microbiology &amp; Immunology</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>MIIM20002 Microbes, Infections and Responses</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>All 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:	MIIM20001 Principles of Microbiology & Immunology	Semester 1	12.50	MIIM20003 Experimental Microbiology	Semester 1, Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	BIOM20001 Molecular and Cellular Biomedicine	Semester 1	25	MIIM20002 Microbes, Infections and Responses	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	MIIM20001 Principles of Microbiology & Immunology	Semester 1	12.50	MIIM20002 Microbes, Infections and Responses	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	MIIM30002 Principles of Immunology	Semester 1	12.50
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<b>Corequisites:</b>	None																																	
<b>Recommended Background Knowledge:</b>	The 200 and 300 level prerequisite subjects should have provided a solid background in Microbiology and Immunology. An understanding of the molecules, genes and biology of the cell is important.																																	
<b>Non Allowed Subjects:</b>	526-314 Medical Microbiology: Viruses (pre 2010) 526-333 Viruses and Other Parasites (pre 2011)																																	

<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 Damian Purcell, Prof Lorena Brown
<b>Contact:</b>	<p>Academic Coordinators  Prof Lorena Brown  <a href="mailto:lorena@unimelb.edu.au">lorena@unimelb.edu.au</a> (<a href="mailto:lorena@unimelb.edu.au">mailto:lorena@unimelb.edu.au</a>)  Assoc Prof Damian Purcell  <a href="mailto:dfjp@unimelb.edu.au">dfjp@unimelb.edu.au</a> (<a href="mailto:dfjp@unimelb.edu.au">mailto:dfjp@unimelb.edu.au</a>)  Administrative Coordinator  Ms Chantelle Linnett  <a href="mailto:BiomedSci-AcademicServices@unimelb.edu.au">BiomedSci-AcademicServices@unimelb.edu.au</a> (<a href="mailto:BiomedSci-AcademicServices@unimelb.edu.au">mailto:BiomedSci-AcademicServices@unimelb.edu.au</a>)</p>
<b>Subject Overview:</b>	<p>This subject describes how viruses and other parasites interact with their hosts to cause infection.</p> <p>The subject will describe the strategies that different groups of viruses employ to replicate in their host cells, and the different outcomes possible for both the virus and the host cell. It will also describe how viruses may be transmitted and detected, and the ways that viruses can cause disease (pathogenesis). The various interactions of the virus and the host's immune system will also be discussed. These topics will be further illustrated by discussing the features of a range of medically important viruses.</p> <p>The subject will also describe other parasites of humans e.g. fungi, protozoan parasites and helminth parasites. It will describe the dynamic interactions that occur between these parasites, their human hosts and the environment and how the outcome of these interactions may vary when changes in any one of these occur. These topics will be further illustrated by discussing the features of a range of medically important parasites.</p>
<b>Objectives:</b>	<p>Upon completion of this course, students should be able to:</p> <ul style="list-style-type: none"> <li># understand fundamental concepts of viral replication, pathogenesis and epidemiology</li> <li># understand how the parasitic relationship of fungi, protozoan parasites and helminth parasites to their human hosts differs from that of viruses</li> <li># apply relevant knowledge of replication, pathogenesis, immunity and epidemiology of these parasites to the determination of appropriate control strategies</li> </ul>
<b>Assessment:</b>	A 1 hour written examination held mid-semester (20%). A 3 hour written examination held in the examination period (80%)
<b>Prescribed Texts:</b>	Principles of Virology, Flint SJ et al., 3rd Edn 2009 (two volumes)
<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/2012/B-ARTS">https://handbook.unimelb.edu.au/view/2012/B-ARTS</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2012/B-COM">https://handbook.unimelb.edu.au/view/2012/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2012/B-ENVS">https://handbook.unimelb.edu.au/view/2012/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2012/B-MUS">https://handbook.unimelb.edu.au/view/2012/B-MUS</a>)</li> </ul>

	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.
<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>	On completion of this subject, students should have developed the following generic skills: <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>	This subject is available to students enrolled in the: <p>Pre-2008 B. Sc  Pre-2008 B. Biomed. Sc. (Stream 7).  NG B. Sc.  NG B. Biomed</p>
<b>Related Majors/Minors/Specialisations:</b>	Animal Disease Biotechnology (specialisation of Animal Health and Disease major) Defence and Disease Immunology (pre-2008 Bachelor of Science) Microbiology (pre-2008 Bachelor of Science) Microbiology, Infection and Immunology Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.