

Microbiology and Immunology

Year and Campus:	2015
Coordinator:	Dr Scott Mueller, A/Prof Katherine Kedzierska, A/Prof Damian Purcell.
Contact:	<p>Coordinators:</p> <p>A/Prof Katherine Kedzierska kkedz@unimelb.edu.au (mailto:kkedz@unimelb.edu.au)</p> <p>A/Prof Damian Purcell dfjp@unimelb.edu.au (mailto:dfjp@unimelb.edu.au)</p> <p>Dr Scott Mueller smue@unimelb.edu.au (mailto:smue@unimelb.edu.au)</p> <p>Administrative Coordinator:</p> <p>Ms Rebecca Whitsed rwhitsed@unimelb.edu.au (mailto:rwhitsed@unimelb.edu.au)</p>
Overview:	<p>Microbiology is the study of microscopic organisms such as algae, bacteria, fungi, protozoa and viruses. Some microorganisms cause infections, but most live harmlessly and enhance our environment and our lives. Microbiology is a core discipline for most areas of biotechnology. Immunology is the study of the immune system. The immune system is involved in the defence of the body against infection and tumours. It also plays a role in some unwanted events, including allergies, autoimmunity and transplant rejection.</p> <p>Honours in Microbiology and Immunology represents a transition from an undergraduate experience taught in a traditional lecture format, to being immersed into a laboratory-based cutting edge research environment. This includes designing and executing experiments, and the analysis, interpretation, presentation and communication of data generated by the research activities. Honours in Microbiology and Immunology provides an opportunity to become directly involved in research that is addressing key questions in the fields of Microbiology and/or Immunology.</p>
Learning Outcomes:	<ul style="list-style-type: none"> # Extend knowledge of Microbiology/Immunology and related areas # Enhance ability to find and critically assess existing scientific information # Develop skills in communication # Conduct/perform independent and novel research with advice and guidance from one of the research groups affiliated with the department. <p>By the end of the year it is expected that you will have learnt from first-hand experience how to formulate questions, design and conduct experiments, analyse and evaluate data, and write scientific papers/reports.</p>
Structure & Available Subjects:	<p>The Honours program consists of 100 credit points completed over 12 months full time (or part time equivalent) comprising of two (2) Advanced Coursework subjects and a Research Project. To be awarded Honours with a specialisation in Microbiology and Immunology, students must successfully complete the following:</p> <ul style="list-style-type: none"> # MIIM40002 - Advanced Microbiology and Immunology I (12.5 points) # MIIM40007 - Advanced Microbiology and Immunology II (12.5 points) # MIIM40005 and MIIM40006 - Microbiology and Immunology Research Project (75 points) <p>There are no elective subjects in this Honours program.</p> <p>The Independent Research Component (75%) has three forms of assessment: A written thesis (55%), direct supervisor assessment (10%) and an oral presentation (10%) at the end of the year.</p> <p>The coursework component (25 %) consists of units designed to enhance a students skills in appropriate interpretation, presentation and communication of scientific data. This will include critical review of scientific literature, interpretation of primary data and presentation of scientific data and concepts in various forms (e.g. poster presentation, paper, grant). This course will</p>

	provide an opportunity to practice skills that can ultimately be applied to the research-intensive activities.																		
Subject Options:	<p>Coursework Component</p> <p>Students must complete 25 credit points of advanced coursework subjects. This is achieved by enrolling in the following subjects in the appropriate semesters.</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MIIM40002 Advanced Microbiology and Immunology I</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>MIIM40007 Advanced Microbiology and Immunology II</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>Research Component</p> <p>Students must complete a total of 75 credit points of research across the duration of the Honours program. This is achieved by enrolling in a combination of the following subjects in the appropriate semesters.</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MIIM40005 Microbiology and Immunology Research Project</td> <td>Semester 1</td> <td>25</td> </tr> <tr> <td>MIIM40006 Microbiology and Immunology Research Project</td> <td>Semester 2</td> <td>50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	MIIM40002 Advanced Microbiology and Immunology I	Semester 1	12.50	MIIM40007 Advanced Microbiology and Immunology II	Semester 1	12.50	Subject	Study Period Commencement:	Credit Points:	MIIM40005 Microbiology and Immunology Research Project	Semester 1	25	MIIM40006 Microbiology and Immunology Research Project	Semester 2	50
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Links to further information:	http://www.microbiol.unimelb.edu.au/																		
Related Course(s):	Bachelor of Biomedicine (Degree with Honours) Bachelor of Science (Degree with Honours)																		