

## VETS60001 Microbiology & Serology: disease control

<b>Credit Points:</b>	25								
<b>Level:</b>	6 (Graduate/Postgraduate)								
<b>Dates &amp; Locations:</b>	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught online/distance.								
<b>Time Commitment:</b>	Contact Hours: Estimated time commitment of 20 hours per week Total Time Commitment: Approximately 320 hours.								
<b>Prerequisites:</b>	Admission to the Master of Avian Health and Medicine. Completion of the following subject with a result of at least 65.								
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>VETS50002 Poultry Path &amp; Diagnosis of Diseases</td> <td>Not offered 2015</td> <td>25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	VETS50002 Poultry Path & Diagnosis of Diseases	Not offered 2015	25
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VETS50002 Poultry Path & Diagnosis of Diseases	Not offered 2015	25							
<b>Corequisites:</b>	None								
<b>Recommended Background Knowledge:</b>	In addition to having current and practical experience working in the poultry industry, students should have an understanding of the potential interactions of pathogen, host and environment, and a sound appreciation of epidemiology (theory and applications) which is most relevant to poultry industry programs of disease eradication and surveillance.								
<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 adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability will impact on their academic performance are encouraged to discuss this matter with the Subject Coordinator and the Disability Liaison Unit.								
<b>Coordinator:</b>	Prof Amir Noormohammadi								
<b>Contact:</b>	Email: <a href="mailto:amirh@unimelb.edu.au">amirh@unimelb.edu.au</a> ( <a href="mailto:amirh@unimelb.edu.au">mailto:amirh@unimelb.edu.au</a> )								
<b>Subject Overview:</b>	This subject is designed to give candidates a detailed understanding of the microbiological culture and serological procedures being applied by laboratories in support of poultry disease diagnosis and prevention. For the different aetiological agents of major infectious avian diseases, students can develop a thorough understanding of the processes and patterns of pathogenesis, modes of spread of infection, and specific immunity mechanisms. Scientific rationales for the approaches needed to prevent infection or to control disease will be explored. Physical and site biosecurity activities will then be integrated with choosing the most appropriate disease exclusion measures, whether it is vaccination, eradication, or immunogenetics-based methods, for each of the pathogens. Appropriate strategies for prevention of infectious diseases on specific production sites should be systematically evolved by veterinarians.								
<b>Learning Outcomes:</b>	Upon successful completion of this subject, students will: <ul style="list-style-type: none"> <li># Have advanced knowledge relating to mechanisms of disease causation by microbial pathogens of poultry;</li> <li># Apply detailed understanding of avian immunity effector mechanisms to ensuring effective protection is being achieved in vaccination;</li> <li># Have a detailed understanding of laboratory techniques for microbiology and serology, and the most effective use of these in practical diagnosis of causes of avian infectious diseases;</li> </ul>								

	<ul style="list-style-type: none"> <li># Design and flexibly implement an appropriate field program of control strategies, so as to ensure effective site biosecurity and/or disease eradication for specific avian pathogens; and</li> <li># Possess advanced knowledge and understanding of national strategies and measures for control of emergency avian diseases.</li> </ul>
<b>Assessment:</b>	Assessment is carried out at the end of each month. Student progress is monitored through class exercises and case studies. The final examination is a three-hour written and online exam held in weeks 16 and 17. Students will be required to arrange an appropriate venue (e.g. a nearby university) to sit this assessment under supervised examination conditions. The breakdown of assessment is: Monthly assessment tests (25% of the final mark) Assignments (10% of the final mark) Class Participation (5% of the final mark) Final Examination (60% of the final mark)
<b>Prescribed Texts:</b>	Students will be provided with excerpts that are required reading.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>Students should:</p> <ul style="list-style-type: none"> <li># Possess medium to high-level computing skills;</li> <li># Apply critical and analytical skills to the identification and resolution of problems;</li> <li># Communicate effectively; and</li> <li># Have good time management skills.</li> </ul>
<b>Links to further information:</b>	<a href="http://www.vet.unimelb.edu.au/futurestudents/avianhealth.html">http://www.vet.unimelb.edu.au/futurestudents/avianhealth.html</a>
<b>Notes:</b>	Reliable internet access with at least a medium speed connection and a personal computer are essential for undertaking the Avian Health Online program. The content is accessed through your web browser. Microsoft Office™ and Adobe Acrobat Reader or equivalent software packages are necessary for assessment tasks, assignments and some class exercises.
<b>Related Course(s):</b>	Master of Avian Health & Medicine