

VETS60001 Microbiology & Serology: disease control

Credit Points:	25
Level:	6 (Graduate/Postgraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: March, Parkville - Taught online/distance. This subject is delivered on-line.
Time Commitment:	Contact Hours: Estimated time commitment of 20 hours per week Total Time Commitment: Not available
Prerequisites:	In order to be eligible for this subject, students must have been admitted to the Master of Avian Health and Medicine (../view/2011/882-AM) .
Corequisites:	None
Recommended Background Knowledge:	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.
Non Allowed Subjects:	None
Core Participation Requirements:	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.
Coordinator:	Assoc Prof Amir Noormohammadi
Contact:	Faculty of Veterinary Science University of Melbourne Victoria, 3010 T: +61 (0)3 8344 7357 W: http://www.vet.unimelb.edu.au/futurestudents/avianhealth.html (http://www.vet.unimelb.edu.au/futurestudents/avianhealth.html) E: vet-info@unimelb.edu.au
Subject Overview:	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.
Objectives:	Upon successful completion of this subject, students will: <ul style="list-style-type: none"> # Have advanced knowledge relating to mechanisms of disease causation by microbial pathogens of poultry; # Apply detailed understanding of avian immunity effector mechanisms to ensuring effective protection is being achieved in vaccination;

	<ul style="list-style-type: none"> # 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; # 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 # Possess advanced knowledge and understanding of national strategies and measures for control of emergency avian diseases.
Assessment:	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. You will be required to identify a University near you where you can be supervised when sitting the exam. 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)
Prescribed Texts:	Students will be provided with excerpts that are required reading.
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<p>Students in the Postgraduate Certificate in Avian Health should:</p> <ul style="list-style-type: none"> # Possess medium- to high-level computing skills; # Apply critical and analytical skills to the identification and resolution of problems; # Communicate effectively; and # Have good time management skills.
Notes:	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.
Related Course(s):	Master of Avian Health & Medicine