

VETS70005 Infections Population and Public Health

Credit Points:	43.75											
Level:	7 (Graduate/Postgraduate)											
Dates & Locations:	This subject is not offered in 2013. Standard											
Time Commitment:	Contact Hours: 336 Total Time Commitment: 504 hours											
Prerequisites:	Satisfactory completion of all subjects at DVM1 level.											
Corequisites:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>VETS70004 Veterinary Bioscience 2</td> <td>Year Long</td> <td>43.75</td> </tr> <tr> <td>VETS70008 Applications in Animal Health 2</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	VETS70004 Veterinary Bioscience 2	Year Long	43.75	VETS70008 Applications in Animal Health 2	Not offered 2013	12.50
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VETS70004 Veterinary Bioscience 2	Year Long	43.75										
VETS70008 Applications in Animal Health 2	Not offered 2013	12.50										
Recommended Background Knowledge:	This course assumes prior knowledge in one or more discipline of science. All students will be expected to be familiar with the principles of scientific thinking, hypothesis development, experimental design, and data collection, analysis and interpretation.											
Non Allowed Subjects:	None											
Core Participation Requirements:	Students should refer to the Core Participation Requirements statement for the Doctor of Veterinary Medicine: http://www.vet.unimelb.edu.au/docs/CoreParticipationReqs.pdf											
Contact:	Email: jrgilk@unimelb.edu.au (mailto:jrgilk@unimelb.edu.au)											
Subject Overview:	<p>This subject introduces students to the study of infectious agents as causes of disease in animals. It includes as appropriate, taxonomic and life cycle considerations of arthropods, nematodes, trematodes and cestodes, protozoa, fungi, bacteria and viruses; the host-parasite interaction and the pathogenesis of disease, disease transmission and epidemiology, methods of diagnosis of infectious disease as well as vaccination and treatment. This understanding is then applied to the public health and food safety context where the focus is on promotion and protection of human health; and to the herd or flock level, where the multifactorial nature of disease is reviewed, and techniques for measurement and prediction of disease prevalence and population health are introduced.</p>											
Objectives:	<p>At the completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # understand the important biological characteristics of infectious agents that cause disease in animals # understand how the immune system protects animals against pathogens # explain how infectious agents exert their pathogenic effects and produce clinical signs of disease # describe the distribution of infectious agents in nature and the methods of their spread amongst animals # describe the principles of therapeutic and non therapeutic control measures used to treat, limit or prevent infectious diseases # apply an understanding of distribution of infectious agents and disease transmission to the context of public health and food safety # appreciate the multifactorial nature of disease # explain how disease is measured and predicted in populations of animals # describe how clinical trials are designed # explain how the spread of disease is controlled # isolate and identify a range of infectious agents # recognise lesions associated with specific infectious diseases. 											

	# describe the roles of veterinarians in contributing to public health through their involvement in animal production and management, food safety management, humane slaughter of livestock for food and disease outbreak investigations.
Assessment:	Six units will be undertaken in this subject: Unit 1 (Veterinary Microbiology, Immunology and Virology) One 2-hour written examination, End of semester 1, 12.5% One 1-hour practical test, During semester, 2.5% Unit 2 (Veterinary Parasitology A) One 2-hour written examination End of semester 1, 12.5% One 1-hour practical test, During semester 1, 2.5% Unit 3 (Veterinary Public Health and Epidemiology A) One 1-hour written examination, End of semester 1, 5% Two 2000-word assignments, Semester 1 weeks 8 and 11, 5% Unit 4 (Veterinary Bacteriology and Mycology) One 2-hour written examination, End of semester 2, 12.5% One 1-hour practical test, During semester 2, 2.5% Unit 5 (Veterinary Parasitology B) One 2-hour written examination, End of semester 2, 12.5% One 1-hour practical test, During semester 2, 2.5% Unit 6 (Veterinary Public Health and Epidemiology B) One 1-hour written examination, End of semester 2, 5% Two 2000-word assignments, Semester 2 weeks 6 and 11, 5% The passing of each unit on aggregate mark is a hurdle requirement. In addition to the specific assessment of the Units (above): Two 1-hour tests Semester 1, Weeks 6 and 10, 5% Two 1-hour tests Semester 2, Weeks 6 and 10, 5% One group literature review assignment (electronic poster) that demonstrates the ability of the students to work as a team to identify the key research concepts within a peer reviewed publication and to search the relevant literature for supporting primary research material. Semester 2 week 8, 5% One individual abstract presentation and tutorial presentation on the above research area. Semester 2 week 8, 5% Students are required to pass the subject on aggregate mark.
Prescribed Texts:	None
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:	<ul style="list-style-type: none"> # have a broad knowledge of science across a range of fields, with an in-depth understanding in one scientific discipline # understand the scientific method, and the history and evolution of scientific concepts # be intellectually curious and apply a rigorous, critical and logical approach to enquiry # be able to communicate their ideas effectively in both written and verbal formats to both specialists and non-specialists # reach a high level of achievement in writing, generic research activities, problem-solving and communication # be efficient managers of information # apply technology to the analysis of biological problems
Related Course(s):	Doctor of Veterinary Medicine