

## VETS70005 Infections Population and Public Health

Credit Points:	43.75											
Level:	7 (Graduate/Postgraduate)											
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Year Long, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus. All students are to enrol in the Year Long availability of this subject, unless directed by the Faculty of Veterinary and Agricultural Sciences.											
Time Commitment:	Contact Hours: 336 Total Time Commitment: 504 hours											
Prerequisites:	Satisfactory completion of all subjects at DVM1 level.											
Corequisites:	<table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>VETS70004 Veterinary Bioscience 2</td><td>Year Long, Semester 2</td><td>43.75</td></tr><tr><td>VETS70008 Applications in Animal Health 2</td><td>Year Long, Semester 2</td><td>12.50</td></tr></table> <p>All students are to enrol in the Year Long availabilities of these corequisite subjects, unless directed by the Faculty of Veterinary and Agricultural Sciences.</p>			Subject	Study Period Commencement:	Credit Points:	VETS70004 Veterinary Bioscience 2	Year Long, Semester 2	43.75	VETS70008 Applications in Animal Health 2	Year Long, Semester 2	12.50
Subject	Study Period Commencement:	Credit Points:										
VETS70004 Veterinary Bioscience 2	Year Long, Semester 2	43.75										
VETS70008 Applications in Animal Health 2	Year Long, Semester 2	12.50										
Recommended Background Knowledge:	This subject 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:	Refer to the Core Participation Requirements statement within the course entry for the Doctor of Veterinary Medicine: <a href="https://handbook.unimelb.edu.au/view/current/MC-DVETMED">https://handbook.unimelb.edu.au/view/current/MC-DVETMED</a>											
Coordinator:	Dr Aaron Jex											
Contact:	Subject Coordinator: <a href="mailto:ajex@unimelb.edu.au">ajex@unimelb.edu.au</a> ( <a href="mailto:ajex@unimelb.edu.au">mailto:ajex@unimelb.edu.au</a> ) Unit 1 Veterinary Microbiology, Immunology and Virology - Prof James Gilkerson (Email: <a href="mailto:jrgilk@unimelb.edu.au">jrgilk@unimelb.edu.au</a> ) Unit 2 Veterinary Parasitology A - Dr Abdul Jabbar (Email: <a href="mailto:jabbara@unimelb.edu.au">jabbara@unimelb.edu.au</a> ) Unit 3 Veterinary Public Health and Epidemiology A - Dr Simon Firestone (Email: <a href="mailto:simon.firestone@unimelb.edu.au">simon.firestone@unimelb.edu.au</a> ) Unit 4 Veterinary Bacteriology and Mycology - Dr Marc Marenda (Email: <a href="mailto:mmarenda@unimelb.edu.au">mmarenda@unimelb.edu.au</a> ) Unit 5 Veterinary Parasitology B - Dr Rebecca Traub (Email: <a href="mailto:rebecca.traub@unimelb.edu.au">rebecca.traub@unimelb.edu.au</a> ) Unit 6 Veterinary Public Health and Epidemiology B - Assoc Prof Jo Devlin (Email: <a href="mailto:devlinj@unimelb.edu.au">devlinj@unimelb.edu.au</a> )											
Subject Overview:	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.											

<b>Learning Outcomes:</b>	<p>At the completion of this subject students should be able to:</p> <ul style="list-style-type: none"> <li># understand the important biological characteristics of infectious agents that cause disease in animals</li> <li># understand how the immune system protects animals against pathogens</li> <li># explain how infectious agents exert their pathogenic effects and produce clinical signs of disease</li> <li># describe the distribution of infectious agents in nature and the methods of their spread amongst animals</li> <li># describe the principles of therapeutic and non therapeutic control measures used to treat, limit or prevent infectious diseases</li> <li># apply an understanding of distribution of infectious agents and disease transmission to the context of public health and food safety</li> <li># appreciate the multifactorial nature of disease</li> <li># explain how disease is measured and predicted in populations of animals</li> <li># describe how clinical trials are designed</li> <li># explain how the spread of disease is controlled</li> <li># isolate and identify a range of infectious agents</li> <li># recognise lesions associated with specific infectious diseases.</li> <li># 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.</li> </ul>
<b>Assessment:</b>	<p>Six units will be undertaken in this subject: Unit 1 Veterinary Microbiology, Immunology and Virology - (19% of total subject assessment) One 2-hour written examination, held at the end of semester 1, 13.5% One 1-hour practical test, held during semester, 3% One 1-hour test held during semester, 2.5% Unit 2 Veterinary Parasitology A - (16% of total subject assessment) One 2-hour written examination, held at the end of semester 1, 13.5% One 1-hour practical test held during semester 1, 2.5% Unit 3 Veterinary Public Health and Epidemiology A - (11.5% of total subject assessment) One 2-hour written examination, held at the end of semester 1, 9% One 1000-word research report, due semester 1, 2.5% Unit 4 Veterinary Bacteriology and Mycology - (16.5% of total subject assessment) One 2-hour written examination, held at the end of semester 2, 13.5% One 1-hour practical test, held during semester 2, 3% Unit 5 Veterinary Parasitology B - (16% of total subject assessment) One 2-hour written examination, held at the end of semester 2, 13.5% One 1-hour practical test, held during semester 2, 2.5% Unit 6 Veterinary Public Health and Epidemiology B - (11% of total subject assessment) One 2-hour written examination, held at the end of semester 2, 8.5% One 1000-word research reports, due semester 2, 2.5% The passing of each unit on aggregate mark is a hurdle requirement. In addition to the specific assessment of the Units (above): One group literature review assignment (electronic poster) that demonstrates the ability of the students to work as a team to identify and critically evaluate the key research concepts within a peer reviewed publication and to search the relevant literature for supporting primary research material. Due semester 2, 5% One individual abstract presentation and tutorial presentation on the above research area. Due semester 2, 5% Students are required to pass the subject on aggregate mark.</p>
<b>Prescribed Texts:</b>	None
<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>	<ul style="list-style-type: none"> <li># have a broad knowledge of science across a range of fields, with an in-depth understanding in one scientific discipline</li> <li># understand the scientific method, and the history and evolution of scientific concepts</li> <li># be intellectually curious and apply a rigorous, critical and logical approach to enquiry</li> <li># be able to communicate their ideas effectively in both written and verbal formats to both specialists and non-specialists</li> <li># reach a high level of achievement in writing, generic research activities, problem-solving and communication</li> <li># be efficient managers of information</li> <li># apply technology to the analysis of biological problems</li> </ul>

**Related Course(s):**

Doctor of Veterinary Medicine