Academic INSIGHTS

immerse EDUCATION

Veterinary Studies



AGES AND LOCATIONS

Ages 15-18: Sydney

Small classes, averaging 7 students.

COURSE INTRODUCTION

Animal science, covering evolution, companion animals, agriculture, wildlife conservation, and zoonotic disease.

You'll learn how to evaluate animal welfare systems, assess disease risk using the epidemiological triad, and recommend improvements.

You'll leave with a completed personal project and a personalised tutor evaluation to draw on in university applications.



EXAMPLE TUTOR

Mei Z

PhD candidate, School of Veterinary Science, University of Sydney; BSc Immunobiology and Mathematics, Sydney

Mei's PhD work models the transmission of a zoonotic pathogen within animal populations using an agent-based approach. She has tutored research skills and disease modelling at the School of Veterinary Science and is a technical officer at Veterinary Pathology Diagnostic Services.

Veterinary Studies sample syllabus

Academic INSIGHTS

WEEK ONE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	**Evolution as a unifying concept** Trace how evolution runs through the life sciences, from the origin of life onwards.	**Mutation and natural selection** Investigate how changes in genetic material give natural selection something to act on.	**The biology of companion animals** Study the physiology of cats, dogs, horses, birds, and exotic pets.	**Companion animal welfare** Review existing guidelines and laws, and recommend how they could be improved.	**Animal production systems** Examine the role of animals in producing food, milk, wool, and eggs.
PM	**The molecular building blocks** Examine how DNA, RNA, and proteins form and regulate cells, tissues, and organisms.	**Speciation and extinction** Explore how new species continue to arise while others disappear.	**Diseases of domestic animals** Examine infectious agents, environmental hazards, and the treatment options available.	**1:1 tutorial** Talk to your tutor about the areas of veterinary science that interest you most, and get suggestions for reading and resources to take them further.	**Ruminants, pigs, and poultry** Compare the common issues and current solutions in each main production system.
		Creativity masterclass Explore divergent, convergent, and lateral thinking, then use SCAMPER to generate and pitch original ideas.		**Personal project supervision** Choose a topic for your personal project, plan your research, and start shaping your presentation.	

WEEK TWO

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	**Breeding, feed, and nutrition** Review how breeds and feed types are selected and how livestock are managed.	**Wildlife management and rehabilitation** Study rescue and rehabilitation practices for critically endangered species.	**Human-wildlife conflict** Consider how habitat loss, climate change, and competition for resources drive species towards extinction.	**The epidemiological triad** Use pathogen, host, and environment as a framework for understanding transmission.	**Personal project presentations** Present your veterinary science personal project to your tutor and peers.
PM	**Aquaculture** Explore the controlled cultivation of fish, crustaceans, molluscs, and algae.	**Conservation in practice** Examine koala health research and Tasmanian devil repopulation programmes.	**Zoonotic pathogens and One Health** Learn how disease moves between animal species, and between animals and people.	**1:1 tutorial** Get feedback on your progress, and talk through your academic ambitions and the university courses and careers veterinary science can lead to.	**Personal project presentations (continued)** Respond to questions and discuss your peers' presentations.
	Critical thinking masterclass Examine the attention economy, echo chambers, logical fallacies, and cognitive bias, then debate a live issue.	**Guest speaker evening** Learn from an inspirational speaker from fields such as broadcasting, writing, philosophy, and sport, then question and debate.	**Personal project supervision** Finalise your research and slides and rehearse your presentation ready for Friday.		**Graduation ceremony** Certificates, speeches, and celebration.

Please note: this is an example syllabus and is subject to change.
Not shown: full evening and weekend social and cultural timetable.