DASC90011 Genetics and Animal Breeding

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: August, Parkville - Taught on campus. Fieldwork: Students will be required to attend up to four offsite practical trips to Geelong as part of this subject.
Time Commitment:	Contact Hours: Up to 45 hours of lectures/practicals/tutorials/fieldwork Total Time Commitment: 170 hours
Prerequisites:	Eligibility for honours or postgraduate degree.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	Q Fever It is a core participation requirement of this subject that students be vaccinated against Q Fever. Do not enrol into this subject if you are unable or unwilling to be vaccinated against Q Fever. For further information please go to: http://students.fvas.unimelb.edu.au/my-studies/q-fever. This subject will run subject to sufficient student enrolments.
Coordinator:	Ms Tina Chamberlain
Contact:	**tcham@unimelb.edu.au (mailto:tcham@unimelb.edu.au)**
Subject Overview:	This subject covers recent advances in the application of genetics and breeding technologies to commercial animal improvement programs including: advanced reproductive technologies, quantitative and molecular genetics. Students will develop the skills to evaluate the potential impact of recent breeding technologies on breeding program design. Practical sessions aim to develop skills in the interpretation of genetic data and to gain knowledge of how reproductive systems can be manipulated to implement advanced breeding technologies, such as artificial insemination (AI), multiple ovulation and embryo transfer (MOET), in vitro fertilisation (IVF), cloning and transgenesis.
Learning Outcomes:	On completion of this subject, students should be able to: # Understand the science underpinning the implementation of advanced genetic, genomic and reproductive technologies in domestic animals. # Evaluate the optimal application of genomics and reproductive technologies to maximise genetic gain in commercial animal breeding programs.
Assessment:	Written exam (2 hrs), held in the end-of-semester examination period (50%) Written assignment (1500 words), due 3 weeks after the end of the block intensive (30%) Oral presentation (10 minutes) and written abstract (500 words), due at the end of the block intensive (20%)
Prescribed Texts:	N/A
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:	On completion of this subject, students should have developed these generic skills: • Academic excellence • Greater in-depth understanding of the scientific disciplines of applied animal genetics

	• Critical thinking and analysis, and problem solving • Flexibility and level of transferable skills should be enhanced through improved ability to communicate ideas effectively in both written and verbal formats
Notes:	This subject will run subject to sufficient student enrolments.
Related Course(s):	Master of Agricultural Science Master of Animal Science Postgraduate Diploma in Agricultural Science
Related Majors/Minors/ Specialisations:	100 Point (A) Master of Agricultural Sciences 100 Point (B) Master of Agricultural Sciences 150 Point Master of Agricultural Sciences 200 Point Master of Agricultural Sciences