DASC30006 Applied Animal Reproduction & Genetics

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Twenty-four lectures; five hours tutorials; 24 hours practical work to be undertaken at Parkville and off-site Total Time Commitment: 170 hours (including non-contact time)
Prerequisites:	Students need to have completed:

Subject	Study Period Commencement:	Credit Points:
BIOL10004 Biology of Cells and Organisms	Semester 1	12.50

And either one of the below:

Subject	Study Period Commencement:	Credit Points:
DASC20010 Applied Animal Physiology	Semester 2	12.50
ZOOL20006 Comparative Animal Physiology	Semester 2	12.50

Corequisites:	None
Recommended Background Knowledge:	Recommended Background Knowledge:

Subject	Study Period Commencement:	Credit Points:
DASC20012 Comparative Nutrition and Digestion	Semester 1	12.50
DASC20011 Companion Animal Biology	Semester 1	12.50
DASC20013 Topics in Animal Health	Semester 2	12.50
ECOL20003 Ecology	Semester 2	12.50
ECOL30006 Ecology in Changing Environments	Semester 1	12.50

Non Allowed Subjects:

Students may not gain credit for this subject and any of:

208-325 Applied Animal Reproduction (prior to 2010)
654-314 Lectures in Reproduction (prior to 2005)
654-304 Reproduction (prior to 2010)

Subject	Study Period Commencement:	Credit Points:
DASC30008 Genetics and Animal Breeding	Not offered 2015	12.50

Core Participation Requirements:

For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. 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 may impact on meeting the requirements of this

	subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p>
Coordinator:	Ms Tina Chamberlain
Contact:	**tcham@unimelb.edu.au (mailto:tcham@unimelb.edu.au)**
Subject Overview:	The aim of this subject is to give students of animal science a fundamental understanding of both applied reproductive biology and genetics. This will enable students to develop the skills necessary for management of reproductive performance and to implement genetic improvement of domestic animals. The content includes comparative structure and function of reproductive organs; endocrinology and neuro-endocrinology of reproductive cycles; environmental and genetic influences on reproduction, interventions to manipulate reproduction; reproductive biotechnologies including cloning; breeding values and selection indices; inbreeding and crossbreeding; applied animal genomics.
Learning Outcomes:	On completion of this subject students should be able to: - describe the comparative structure and function, as well as endocrine and neuroendocrine control of the reproductive systems; - identify factors affecting reproduction and define management strategies to optimise reproductive performance; - critically evaluate new and emerging technologies for modifying reproductive performance, - express how genetic parameters influence animal improvement programs; - contrast potential negative effects of inbreeding with potential advantages of crossbreeding; - evaluate the impact of manipulating reproduction to optimise breed improvement programs
Assessment:	End of semester examination of 2 hours (60%) during the exam period One written assignment of 1000 words (20%) due in approximately week 6 Two written practical reports of 500 words each (20%) due in approximately week 1 and week 9
Prescribed Texts:	None
Recommended Texts:	Applied Animal Reproduction / Edition 6by H. Joe Bearden, John W. Fuquay and Scott T. Willard
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2015/B-ARTS)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2015/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2015/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Please refer to objectives
Notes:	*This subject involves the use of animals. Students should be aware that this is an essential part of the subject and exemption from this component is not possible.* *Credit cannot be gained for DASC30006 and/or DASC30008.* **Q Fever** Students enrolling in the Melbourne School of Land and Environment are advised that some courses of study may put them at an increased risk of contracting Q Fever. Q Fever is a relatively common preventable condition which, while rarely fatal, can cause a severe acute illness and can result in damage to heart valves and chronic fatigue. It is recommended that students consider undertaking screening and vaccination for Q Fever prior to commencement

	of study. Students may be required to provide proof of vaccination prior to undertaking some coursework. Your course coordinator will advise you of this requirement prior to commencement of the study semester. Vaccine costs for students are not covered by the Pharmaceutical Benefit Scheme, Medicare, or by the University. Some students with full private medical coverage (which has hospital and ancillary cover) may receive partial re-imbursement for vaccine costs.
Related Majors/Minors/ Specialisations:	Animal Disease Biotechnology (specialisation of Animal Health and Disease major) Animal Science and Management Production Animal Health Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED Sustainable Production