DASC30006 Applied Animal Reproduction & Genetics

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2016, 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
Prerequisites:	

Subject	Study Period Commencement:	Credit Points:
BIOL10005 Genetics & The Evolution of Life	Semester 2	12.5

Corequisites:	None
Recommended Background Knowledge:	Recommended Background Knowledge:

Subject	Study Period Commencement:	Credit Points:
DASC20010 Applied Animal Physiology	Semester 2	12.5
DASC20012 Comparative Nutrition and Digestion	Semester 1	12.50
DASC20011 Companion Animal Biology	Semester 1	12.50
VETS20015 Foundations of Animal Health 2	Semester 2	12.5

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 2016	12.50

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 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 the Disability Liaison Unit:http://www.services.unimelb.edu.au/disability/
Coordinator:	Ms Tina Chamberlain
Contact:	Email: **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:	A 1000-word assignment due in approximately Week 6 worth 20% Two written practical reports of 1000 words in total due in approximately Week 9 and Week 11 worth 20% A two-hour end-of-semester exam worth 60%
Prescribed Texts:	None
Recommended Texts:	*Applied Animal Reproduction* Edition 6 by 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/2016/B-ARTS)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/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** 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 (http://students.fvas.unimelb.edu.au/my-studies/q-fever)**
Related Majors/Minors/ Specialisations:	Agricultural Economics Animal Disease Biotechnology (specialisation of Animal Health and Disease major) Animal Science and Management Plant and Soil Science Production Animal Health Production Animal Science Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED Sustainable Production