DASC90006 Nutrition and Feed Science

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: September, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Up to 45 hours of lectures/practicals/tutorials Total Time Commitment: Total Time Commitment (including non contact hours): 170 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	• Knowledge and understanding of Microsoft Excel for modelling exercises; training provided in formulation packages; • Access to LMS required for simulation models and prescribed reading.
Non Allowed Subjects:	None
Core Participation Requirements:	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. This course requires all students to enrol in subjects where they must actively and safely contribute to laboratory activities. Students who feel their disability will impact on meeting this requirement are encouraged to discuss this matter with the Subject Coordinator and Disability Liaison. Health requirements Q Fever Students enrolling in this subject 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.
Coordinator:	Dr Kristy Digiacomo
Contact:	**kristyd@unimelb.edu.au (mailto:kristyd@unimelb.edu.au)**
Subject Overview:	The subject examines the applications of new technologies in processing and analysis of feeds for a range of animal species. The subject will introduce empirical, mechanistic and telemetric models to evaluate animal performance under different dietary regimes. Furthermore, the implications of feed composition and evaluation on mechanistic modeling of nutrient uptake and utilization by the animal will be assessed. The modeling procedures will also be used to evaluate wastage of C and N in animal production systems with special emphasis on the losses of C as methane and N as ammonia and nitrous oxides.
Learning Outcomes:	The objectives of this subject are to: 1. To develop an awareness of empirical, mechanistic and telemetric methods of modelling animal systems. 2. To be able to formulate diets for a variety of liverstock using a feed formulation package. 3. To characterize the impacts of different feed composition on animal performance. 4. To evaluate G x E interactions of livestock and feeds. 5. To develop an awareness of greenhouse gas emission sources and potential feed based mitigation strategies.

Assessment:	1 x oral report based on practicals for 10 minutes during semester. This is a hurdle requirement and is not assessed. 2 x 2000 word written assignments (100%). The first assignment will be due by the end of week 2 and the second will be due at the end of semester.
Prescribed Texts:	none
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 the following generic skills: # academic excellence; # a greater in-depth understanding of scientific disciplines of animal nutrition. # The study will develop critical thinking and analysis; and problem solving. # Flexibility and level of transferable skills should be enhanced though improved ability to communicate ideas effectively in both written and verbal formats.
Notes:	**Q Fever** Students enrolling in this subject 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 Course(s):	Graduate Certificate in Agricultural Sciences Graduate Diploma in Agricultural Sciences Master of Agricultural Science Master of Animal Science Postgraduate Diploma in Agricultural Science
Related Majors/Minors/ Specialisations:	100 Point (A) Master of Agricultural Sciences 150 Point Master of Agricultural Sciences 200 Point Master of Agricultural Sciences Animal Science Specialisation Honours Program - Agricultural Science Honours Program - Animal Science and Management