**DASC90006 Nutrition and Feed Science** 

| Credit Points:                       | 12.5  |
|--------------------------------------|---|
| Level:                               | 9 (Graduate/Postgraduate)   |
| Dates & Locations:                   | 2016, 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: 170 hours   |
| Prerequisites:                       | None  |
| Corequisites:                        | None  |
| Recommended<br>Background Knowledge: | <ul> <li>Knowledge and understanding of Microsoft Excel for modelling exercises; training provided in formulation packages</li> <li>Access to LMS required for simulation models and prescribed reading</li> </ul>  |
| Non Allowed Subjects:                | None  |
| Core Participation<br>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.   tis 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: <a href="http://services.unimelb.edu.au/disability">http://services.unimelb.edu.au/disability</a>   student Studen |
| Coordinator:                         | Dr Kristy Digiacomo   |
| Contact:                             | Email: 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 modelling of nutrient uptake and utilization by the animal will be assessed. The modelling 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:  # To develop an awareness of empirical, mechanistic and telemetric methods of modelling animal systems  # To be able to formulate diets for a variety of livestock using a feed formulation package  # To characterize the impacts of different feed composition on animal performance  # To evaluate G x E interactions of livestock and feeds  # To develop an awareness of greenhouse gas emission sources and potential feed based mitigation strategies  |
| Assessment:                          | A 2000 word written assignment due approximately end of week 6 worth 50% A 2000 word written assignment due end of semester worth 50% HURDLE REQUIREMENT: A 10 minute oral report based on practicals due during semester   |
| Prescribed Texts:                    | none  |

Page 1 of 2 01/02/2017 6:01 P.M.

| 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 |
| 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/<br>Specialisations: | 100 Point (A) Master of Agricultural Sciences 150 Point Master of Agricultural Sciences 200 Point Master of Agricultural Sciences Animal Science Specialisation   |

Page 2 of 2 01/02/2017 6:01 P.M.