

MC-ANISCI Master of Animal Science

Year and Campus:	2011 - Parkville
CRICOS Code:	064717M
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	200 credit points taken over 24 months full time. This course is available as full or part time.
Coordinator:	Dr Ian Bland
Contact:	<p>Melbourne School of Land & Environment Student Centre Ground Floor, Land & Food Resources (building 142)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)</p>
Course Overview:	<p>Candidates will graduate with an excellent understanding of the many factors underpinning animal systems and an awareness of methods for sustainable food and fibre production and their markets. The aims of the Masters of Animal Science (coursework) are to further develop an understanding of the biology of domestic and captive animals, their care, management and use as a resource for food, fibre, recreation and companionship; to develop an in-depth knowledge of the biology of animals, the complexities of the ethical and moral issues encompassing care, management and use as a resource will be examined in light of advances in human endeavour. The masters will allow a degree of specialisation based around analysis of animal systems management of a chosen species or classification of animals. The course design comprises theory and technology applications, with a focus on improving current cropping and animal production systems for increased product yields and qualities within Australian and International environments.</p> <p>Animal science masters also comprises many existing and novel emerging areas in the animal and associated sciences, aimed to create opportunities for advances in the manipulation of biological systems for increased productivity. The scientific tools and advances are evolving fast and are being directly applied to food and fibre industries worldwide.</p>
Objectives:	<p>The objectives of this course are to:</p> <ul style="list-style-type: none"> # enable students to explore the interdisciplinary nature of animal science at an advanced level # provide students with a sound foundation in the scientific principles and analytical skills behind improved animal systems (farm and companion animals) and their sustainability # introduce the student to advanced research topics and practical applications within the disciplines of animal science # develop competence in the design, conduct and analysis of experimental work # introduce students to industrial applications of animal science and the commercial outcomes # develop a critical understanding of environmental, economic, social and ethical factors related to animal-derived food and fibre production in Australia and globally.
Course Structure & Available Subjects:	<p>The Master of Animal Science (coursework) consists of 200 credit points of study at level 400 and above. The Master course may be undertaken as either full time study over two years or part time study over four years and will be delivered at the Parkville campus. International students may only enrol in the course on a full time basis.</p> <p>Year 1 comprises five core subjects (two of which are selectives and including a 25 point research project subject) and two other elective subjects. Students will be able to choose elective subjects from a range of subjects offered in the Master of Agricultural Science, Master of Food Science and Master of Agribusiness as well as from a list of approved subjects offered by other University of Melbourne faculties, subject to approval by the Course Coordinator.</p> <p>Year 2 comprises a further four core subjects and a 50 point research project. The core subjects are 'systems based subjects' that evaluate critical areas of the animal industries. The electives</p>

can be drawn from a range of bespoke subjects that are cognate to animal science. Students must complete a masters' research project of 50 points in their final year of study.

Subject Options:**Core Subjects**

These subjects are core to the Master of Animal Science (Coursework) Program.

Subject	Study Period Commencement:	Credit Points:
DASC40003 Special Studies in Animal Science	Year Long	12.50
DASC40001 Advanced Animal Management Systems	Semester 1	12.50
NRMT40001 Emerging Issues in Land Resources	Semester 2	12.50
AGRI90065 Project B	Semester 1, Semester 2	25

Core Selective Subjects 1

These subjects are core selectives as part of the Master of Animal Science (Coursework) program. You MUST choose one of the following two subjects.

Subject	Study Period Commencement:	Credit Points:
MAST90008 Research Philosophies & Statistics	Semester 1	12.50
NRMT90003 Social Research Methods	March	12.50

Core Selective Subjects 2

These subjects are also core selectives as part of the Master of Animal Science (Coursework) program. You MUST also choose one of the following two subjects.

Subject	Study Period Commencement:	Credit Points:
AGRI90064 Project A	Not offered 2011	25
AGRI90070 Project A	Year Long	25

Elective subjects (Animal Science Discipline)

The following subjects are electives within the Master of Animal Science (Coursework) program.

Subject	Study Period Commencement:	Credit Points:
DASC90009 Behaviour of Farm & Companion Animals	May	12.50
DASC90006 Animal Feed Science	Not offered 2011	12.50
DASC90005 Animal Metabolism & Nutrition	Not offered 2011	12.50
DASC90007 Stress Physiology	March	12.50
DASC90011 Genetics and Animal Breeding	Semester 2	12.50
DASC90012 Animal Welfare	October	12.50
DASC90010 Dairy Systems	October	12.50
DASC90008 Monogastric Science	March	12.50

Elective subjects from within the Melbourne School of Land and Environment

The following subjects are electives within the Master of Animal Science (Coursework) program.

Subject	Study Period Commencement:	Credit Points:
FOOD90020 Food Biotechnology	Not offered 2011	12.50
NRMT90004 Conservation Genetics	Not offered 2011	12.50

	AGRI90014 Managing Markets	June	12.50
	AGRI90071 Supply Chain Management	Not offered 2011	12.50
	NRMT90002 Management of Plant and Animal Invasions	Semester 2	12.50
Entry Requirements:	<p>i. The Selection Committee will evaluate the applicant's ability to successfully pursue the course using the following criteria:</p> <ul style="list-style-type: none"> # An honours degree or equivalent qualification. Or # Undergraduate tertiary qualification with a weighted average of 65% or better in the final year of study. Or # Successful completion of a Graduate / Postgraduate Diploma with a weighted average of 65% or better. <p>ii. Completion of an Honours program or a Postgraduate Diploma in Animal Science and Management (or equivalent) will give an advanced standing of 100 points into the Master of Animal Science.</p> <p>iii. The course is primarily designed for students with a science-based background with biology and/or chemistry. The Selection Committee may conduct interviews and tests and call for referee reports and employer references to elucidate any of the matters referred to above.</p>		
Core Participation Requirements:	<p>The Melbourne School of Land and Environment (MSLE) welcomes applications from students with disabilities. It is University and School policy to take reasonable steps to make reasonable adjustments so as to enable the student's participation in the School's programs. MSLE contributes to the New Generation degrees and offers a broad range of programs across undergraduate and post-graduate levels many of which adopt a multi-disciplinary approach. Students of the School's courses must possess intellectual, ethical, and emotional capabilities required to participate in the full curriculum and to achieve the levels of competence required by the School. Candidates must have abilities and skills in observation; motor in relevant areas; communication; in conceptual, integrative, and quantitative dimensions; and in behavioural and social dimensions. Adjustments can be provided to minimise the impact of a disability, however students need to be able to participate in the program in an independent manner and with regard to their safety and the safety of others. I. Observation: In some contexts, the student must be able to observe demonstrations and experiments in the basic and applied sciences. More broadly, observation requires reading text, diagrams, maps, drawings and numerical data. The candidate should be able to observe details at a number of scales and record useful observations in discipline dependant contexts. II. Communication: A candidate should be able to communicate with fellow students, professional and academic staff, members of relevant professions and the public. A candidate must be able to communicate effectively and sensitively. Communication includes not only speech but also reading and writing. III. Motor: Candidates should have sufficient motor function necessary for participation in the inherent discipline-related activities. The practical work, design work, field work, diagnostic procedures, laboratory tests, require varying motor movement abilities. Off campus investigations may include visits to construction sites, urban, rural and/or remote environments. IV. Intellectual-Conceptual, Integrative and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of professionals in land and environment industries, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. V. Behavioural and Social Attributes: A candidate must possess behavioural and social attributes that enable them to participate in a complex learning environment. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. Students who feel their disability will prevent them from meeting the above academic requirements are encouraged to contact the Disability Liaison Unit.</p>		
Further Study:	There is a clear progression pathway from masters by coursework programme to PhD.		
Graduate Attributes:	The graduates from the Master of Animal Science (coursework) will have achieved academic excellence in their chosen field(s) of study. They will possess in-depth knowledge in those fields(s) and have been equipped with all necessary tools and skills to become leaders at both national and global levels.		

Generic Skills:	<ul style="list-style-type: none"># A profound respect for truth, intellectual and professional integrity, and the ethics of scholarship# Capacity for independent critical thought, rational inquiry and self-directed learning and research# An ability to derive, interpret and analyse social, technical or economic information from primary and other sources# Awareness of and ability to utilise appropriate communication technology and methods for the storage, management and analysis of data# Capacity for creativity and innovation, through the application of skills and knowledge# Ability to integrate information across a relevant discipline to solve problems in applied situations# Highly developed computer - based skills to allow for effective on-line learning and communication.# Highly developed written communication skills to allow informed dialogue with individuals and groups from industry, government and the community# Highly developed oral communication skills to allow informed dialogue and liaison with individuals and groups from industry, government and the community.# Appreciation of social and cultural diversity from a regional to a global context# Ability to participate effectively as a member of a team# Ability to plan work, use time effectively and manage small projects
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