

Rangeland Management course descriptions

Most Part A courses are assessed through assignment work and do not have examinations. Part B courses, offered in partnership with other providers, are provided in the semester as indicated.

It is recommended that where possible, Part B courses be undertaken following completion of all necessary Part A rangeland management courses. Part B courses will be changed regularly as more rangeland-specific courses, developed to meet expressed needs, are rolled out.

For more detailed course descriptions/course profiles go to: www.uq.edu.au/study/

Part A courses

Course Code and Name	Semester offered	Brief description	Assessment requirements
AGRC7001* Sustainable Rangeland Production Systems and Regions	1, 2	This course examines the drivers of sustainability, and industry and government commitment to the concept. It covers principles of sustainable development, requirements for sustainable regions, landscapes and enterprises, efforts to achieve sustainable regions and enterprises, and economic, social and institutional impediments to achieving sustainability. Key biophysical and socio-economic characteristics of rangeland systems are explored with respect to the use and management of these systems. This course provides the foundation for further study of the use and management of rangelands and introduces sustainable grazing practices.	Two assignments and online discussions
MGTS7976* Building Effective Stakeholder Engagements	2	Resolution of management and planning issues in the rangelands increasingly involves a diversity of stakeholders. The outcomes of these devolved processes have significant and far-reaching economic, environmental and social implications for rangeland enterprises and regions. This course develops the skills to be an effective participant in such processes, and to design and manage effective stakeholder engagement based on knowledge of culture, values and aspirations of various stakeholders. This knowledge is applied in a stakeholder engagement process. NOTE: Students undertaking this course need to be actively involved in a participative process, involving several stakeholder groups, to complete the learning activities and assessments. For example, active in the development of a regional plan, active in local Government, or involved in community engagement with respect to an NRM issue, development, etc.	Two assignments and online discussions

<p>LPWM7611/ 7612/7613 #4 Graduate Research Project I or LPWM7617/ 7618/7619 #8 Graduate Research Project III</p>	<p>1,2</p>	<p>This course involves the design, implementation and presentation of a research project approved by the Director of Rangelands Australia. The project will examine an integrated rangeland management issue which focuses on at least two (preferably three) dimensions of the 'triple bottom line'. Emphasis is placed on defining the research issue, establishing an appropriate methodology, undertaking appropriate collection and analysis of data & drawing defensible conclusions and recommendations. Students are advised to negotiate the project to be investigated with the Program Coordinator or Director, Rangeland Australia prior to the commencement of the project. Students completing the course in one semester must enrol in LPWM7617. Students completing the course in two semesters must enrol in LPWM7618 for both semesters if commencing in semester 1 or LPWM7019 if commencing in semester 2.</p>	<p>Presentation of report in a format appropriate to the project.</p>
<p>ENVM6501 Research, Development and Extension Methodologies</p>	<p>1,2</p>	<p>Examines the broad philosophies, paradigms and methodologies encompassing the whole process of research, development and extension in natural and agrifood systems and rural communities. Provides examples of the field application of various methodologies and challenges students to develop their own research proposals.</p>	<p>Progressive and written report</p>
<p>STAT7501 Advanced Biometrics 1</p>	<p>1</p>	<p>This course is designed to meet the individual student needs.</p>	
<p>MKTG7965* Global and National Trends, Local Scenarios</p>	<p>1</p>	<p>There are many forces driving economic, environmental and social change in the world, and these can impact, directly or indirectly, on practices, livelihoods, lifestyle and communities in the rangelands. This course explores the economic, environmental and social trends that may influence planning and management in the rangelands. It will develop skills in scenario analysis, tracking trends and emerging issues, in identifying opportunities and decision-making, as well as build capacity for strategic management in the face of continuing change.</p>	<p>Two assignments and online discussions</p>

Part B courses

Course Code and Name	Semester offered	Brief description	Assessment requirements
AGRC7023* Grazing Land Management	1	This course explores issues in the sustainable use and management of the rangelands, with particular emphasis on meat and wool production. The course covers grazing as an ecological process, the theory and practices of grazing management, grazing strategies in a variable climate, grazing systems, managing pastures in complex landscapes, management constraints, issues (e.g. pests and weeds) and options (e.g. fire) in major rangeland types, and tools such as decision support.	Three assignments
AGRC7027* Rangeland Pests, Weeds and Biosecurity	2	The course develops an understanding of the biology, ecology and costs of key weed, insect & vertebrate pests together with landowner obligations and legislative requirements. The course also examines strategies for early detection and methods by which pests can be managed including physical, cultural, chemical and ecological methods, and their integration into IPM and landscape management strategies.	
AGRC7028* Rangeland Monitoring and Adaptive Management	2	This course examines the role, tools and use of monitoring for regional, enterprise and paddock monitoring to enable the most appropriate information for decision making. It also covers collection, analysis and interpretation of data and integration of the information into decision making that affects production systems and risk management.	
AGRC7029* Diversification and New Industries in the Rangelands	1	This course examines the financial and environmental aspects of diversification options for the rangelands. This course looks at how to research options and conduct market research; investigate supply chains and markets; find start up funds; investigate legal restrictions; project cash flows; use qualitative forecasting techniques and deal with risk.	
AGRC7030* Reading Country and Natural Resources	1 (from 2009)	This course develops understanding of natural resources including cycles and patterns of key resources such as nutrients, water, plants, etc. It will develop the critical observational and interpretive skills necessary to assess and evaluate landscapes in order to 'read country' and improve everyday decision making and management practices.	
AGRC7031* Property, Catchment and Regional Planning	2	This course examines the processes involved in property planning; setting business goals, evaluating the effects of change within a property and at a catchment and regional level, in order to implement changes that are ecologically sustainable.	Three assignments and online discussions
AGRC7035 Advanced Rangeland	2	The course examines the characteristics and classification of rangelands; ecological concepts and principles applicable to rangelands; models used in understanding ecological	Assignments/ Case Study

Ecology		processes in rangelands; ecological function and dysfunction in rangelands; ecological assessment of rangelands.	
AGRC7037 'E' Technologies for the Food and Fibre Sector	1 (web-based)	An in-depth study of the major issues facing the food and fibre sector throughout the supply chain from onfarm to the consumer when moving into the electronic business environment. Current agri-industry examples are used throughout.	Consultancy report, major 'E' agribusiness project and report, web-based discussions and skills portfolio
AGRC7100 Introduction to Rural Industries	1	An overview of Australian agriculture covering industries, economic performance, resources, land use, production systems including equipment, improvements and their valuation and major industry issues. NOTE: AGRC7100 is only available to students undertaking the Graduate Certificate who do not have a background in agriculture, economics or a related field.	Assignments are field exercises
ANIM7017* Animal Nutrition and Behaviour	2	Starting from a market perspective, this course will explore issues of animal digestion and nutrient requirements; pasture growth and nutritive value; the theory and practice of pasture and grazing management to optimise yield & quality of animal products; tools for monitoring nutritional status and strategies for managing nutritional deficiencies. Course includes domesticated, native and feral animals. NOTE: Students undertaking this course will need to have access to a grazing property to complete the assessments for this course.	Three assignments
ANIM7018* Livestock Wellbeing and Health	1 (from 2009)	The course will investigate current issues in livestock welfare and health, and how they can impact and constrain animal productivity. It will examine and interpret animal behaviour to increase safety and efficiency and minimise stress in working stock and develop an understanding of the principles of epidemiology, including the importance of the identification, control and prevention of common diseases in livestock herds and feral animals.	
ENVM7512 Environmental Problem Solving	2	The course develops a problem solving framework for environmental management. It provides an appreciation of disciplines which define dimensions of environment problem decision space and its relevance to other studies.	Reports and poster
FINM7960 Agribusiness Project Appraisal	2	This course is an examination of the financial appraisal of capital investments in the agribusiness sector; project appraisal concepts, the time value of money and essential financial formulae, project cash flows, qualitative	Progressive test, assignment and final

		forecasting techniques and how to deal with risk when undertaking project appraisals.	examination
LAND7000 Water and Land Resource Management	2	This course involves the study of hydrology and land degradation processes within a landscape context; use of this knowledge to define the principle of sustainable land and water resource use for agriculture, forests, rangelands, recreation areas and urban zones; development of practical land management packages for conservation of land and water resources.	Progressive and final examination
LPWM6640 Postgraduate Advanced Topic	1, 2	This course is a piece of directed work under supervision of academic staff & approved the Director. Students are advised to negotiate the project to be investigated with the Director, Rangelands Australia/ Program Coordinator prior to the commencement of the project.	Determined on a case by case basis.
LAWS7960* Legal, Policy and Political Frameworks in the Rangelands	2 (from 2009)	This course develops understanding of the processes of policy formation and policy analysis, including the roles of government agencies in policy generation and compliance, and how to influence policy making and makers. The course also examines the law and legislation as it relates to property owners and managers with respect to property rights and responsibilities, land tenure, the environment, animal welfare, equal opportunity and health and safety issues.	
MGTS7960 Agribusiness Supply Chain Management	1	Investigates theory and practice of supply chain formation management and performance in the context of globally competitive agribusiness firms.	Project and case studies
MGTS7968 Rural Community Development	1	The course explores the processes and current issues in rural community development, leading and facilitating community groups and the social and cultural processes relevant to rural community development and social sustainability.	
MGTS7978* Managing Self, Developing and Retaining Others	1	This course provides an introduction to the personal and interpersonal aspects of people management. It develops key people management processes and skills including: leadership; motivating others; valuing others; developing other's skills and abilities; building positive attitudes; managing conflict and change; building effective teams and developing self-awareness.	Self- assessment and reflective journal, two assignments and online discussions
MKTG7960 Commodities, Futures and Options	2	Risk management is a vital part of any business but becomes more important for agribusiness firms involved in the international trade of agricultural commodities. Although there are many sources of risk, price risk management is of particular relevance to agribusiness managers be they managers of production units, trading companies or downstream processors. In this course students will investigate the various tools available to	Project and case studies

		agribusiness managers to manage price risk and develop a framework for these managers to develop a price risk management strategy. In addition you will be given an opportunity to utilise these tools by participating in a simulated price risk management project.	
MKTG7961 Agribusiness Marketing	1	The course examines the forces of change that impinge on agribusiness firms and develops a marketing framework that individual managers can utilise to cope with these changes.	Progressive tests, project and final examination
Meat Technology	1, 2	This unit provides an advanced understanding of industry activities in meat processing. It covers all aspects of the operations of meat works; meat safety, meat preservation, storage, packaging and transport; secondary processing and smallgoods production; industry by-products; pet foods; hides and skins and the chemistry of meats. All domestic species are covered. Compulsory residential school at Armidale, NSW. NOTE: Students interested in doing this course will have to undertake it by cross-institutional enrolment. Contact the University of New England, School of Rural Science and Agriculture for further details. (02 6773 2347)	
Sheep Production (Wool and Meat)	1	This unit introduces the major themes associated with sheep production in Australia including: wool production, sheep meat production, sheep management, sheep breeding, grazing and nutritional management. The unit represents a specialization for students planning to enter the sheep and wool industry. Students enrolled in this course will have to complete additional guided reading/practical work appropriate to the needs of individual students. NOTE: Students interested in doing this course will have to undertake it by cross-institutional enrolment. Contact the University of New England, School of Rural Science and Agriculture for further details.	
Ecology and Management of Tropical Forests and Savannas	1	This unit focuses on the ecology and management of tropical savannas. Current knowledge on the determinants of structure and function of tropical savannas will be described. Management issues in savannas will be examined and the relationship between the ecology and management of savannas will be emphasised. NOTE: Students interested in doing this course will have to undertake it by cross-institutional enrolment. Contact Charles Darwin University, School of Science and Primary Industries for further details. (08 8946 6408)	