

A course developed by ...



RANGELANDS AUSTRALIA

SUSTAINABLE RANGELAND PRODUCTION SYSTEMS AND REGIONS

Postgraduate Course – AGRC7001

Available Semesters 1 and 2
(Subject to minimum numbers)

OVERVIEW

This course provides an overview of one of the major forces of change in Australia's rangelands today - the quest for sustainable production systems and sustainable regions. Sustainability affects government, business, organisations and individuals, and their commitment to it is central to achieving economic, environmental and social sustainability.

In this over-arching course you will be given an introduction to global and national sustainability issues, and learn more about the elements of sustainable regions, sustainable landscapes, sustainable enterprises and production systems with respect to the rangelands.

This course provides insight into the evolving concept of sustainability, efforts to achieve sustainability, and ways of tracking progress towards economic, environmental and social sustainability. The course also identifies sources of information to keep up to date with developments in science, community views and policy on sustainable production systems and sustainable regions.

LEARNING OBJECTIVES

On completion of this course you will be able to:

- Explain the evolving concept of sustainable development/ecologically sustainable development (ESD), its underlying principles and values, and the commitment of government, business, community and industry to it
- Identify different perceptions of sustainability within your region, develop your own viewpoint and appreciate where your view(s) sit(s) in the spectrum of views
- Analyse global and national issues and problems driving sustainability initiatives and wider change in rangeland practice(s)
- Analyse case studies of regional and enterprise-scale sustainability initiatives and the implications for policy
- Analyse the economic, social and institutional impediments to achieving sustainable production systems/regions and proposed industry and institutional solutions to these impediments
- Identify and evaluate assessment frameworks, targets and widely accepted indicators of rangeland sustainability
- Identify the characteristics that contribute to the perceived complexity of rangeland systems, and their resilience
- Analyse 'best practice' guidelines for enterprise and regional sustainability and appreciate the knowledge deficiencies and R&D in progress to address the knowledge gaps
- Analyse progress towards sustainability in the forestry, tourism and mining industries, and the lessons to be learnt from these sectors
- Demonstrate skills in communication (i.e. verbal, report writing, etc), on-line learning, information acquisition and management, critical thinking, etc.

COURSE STRUCTURE

Course modules include:

- What is sustainability, sustainable development and ecologically sustainable development (ESD)?
- Drivers of sustainability and change
- Moving towards sustainability
- Impediments or constraints on ESD implementation
- Tracking aspects of sustainability
- Key characteristics of rangeland systems
- Sustainable grazing management
- Implications of climate change.

LEARNING FACILITATOR

Dr John A Taylor (BAppSci Hons; PhD). John is a graduate of Queensland and New England Universities who has worked in the rangelands for over 30 years, and has wide experience of the rangelands of northern Australia and NSW. He has specialized in rangeland ecology and management, and his interests include grazing management, sustainable landscapes, building the capacity of our land managers for the future, and strengthening understanding between rural and urban Australia.

He has considerable 'external' experience as a Director of the Land & Water Resources R and D Corporation, and was Acting Chief of CSIRO Tropical Crops and Pastures and then Deputy Chief of CSIRO Tropical Agriculture before going to UQ Gatton as Professor of Rangeland Management. John has also been Deputy Chairman of the North Australia Beef Research Council (NABRC), Chairman and member of the Board of the Agricultural Production Systems Research Unit (APSRU), member of the Advisory Board of the Institute of Sustainable Regional Development (ISRD), and member of the Expert Panel for the Land chapter of the 2001 and 2006 State of the Environment Reports.

John is on the Board of the Desert Knowledge CRC, and chairs its Desert Advisory Forum.

REQUIRED TEXT BOOKS

There are no books required for this course. Students are supplied with a book of readings that includes essential materials required for completion of learning activities and assessment items.

ASSESSMENT

There are no 'examinations', just three assessment items for this course.

Assessment 1: Online discussion activities - 40%

Throughout the course you will be required to complete 7 online learning activities. These will involve responding to readings and other stimuli, and reading and responding to the postings of other students and the course coordinator.

Assessment 2: Motivational presentation – 25%

You will develop a 'call to action' presentation identifying local sustainability issues and their implications, and potential collaborations and strategies to address them.

Assessment 3: Implications report – 35%

You will provide a written report (maximum 3500 words) on the 'triple bottom line' implications of interventions to address a sustainability issue(s) at a scale of particular interest to you, i.e. either an enterprise, or regional or national - scale sustainability issue.

BACKGROUND TO THIS COURSE

The need for this course was identified by a national survey of education and skills needs for success in the rangelands. This course was developed by RA and provides the first rangeland-specific collation of information on sustainable production systems and regions. The structure, content and resources used in this course were influenced by experienced producers (private and corporate) from Queensland, NSW, NT and SA; and advisors and/or researchers from CSIRO Sustainable Ecosystems, NSW Agriculture, NT Department Business, Industry & Resource Development, Q Department Primary Industries & Fisheries, The University of Queensland, and WA Department of Agriculture.

A draft of the course was reviewed by rangeland managers, advisors and researchers from CSIRO, NSW Agriculture, Old Department of Primary Industries and Fisheries, WA Department of Agriculture, and the University of Queensland.

COURSE EVALUATIONS

Students completing this course in 2005-07 were asked to evaluate the perceived relevance, practicality and quality of the course and its delivery (on 1-5 scale, with 1=strongly disagree and 5=strongly agree). The following average ratings were received:

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| • Clear and relevant learning objectives | 4.6/5.0 |
| • Satisfied with the course content | 4.3/5.0 |
| • Satisfied with the amount of contact with the Learning facilitator | 4.3/5.0 |
| • I gained new skills and knowledge | 4.3/5.0 |
| • Learning and assessment activities challenged me to think | 4.7/5.0 |
| • Course is well structured and components well integrated | 4.3/5.0 |
| • Course is relevant to my workplace/business | 5.0/5.0 |
| • Course is relevant to my future in the rangelands | 5.0/5.0 |
| • Overall, I'm satisfied with this course | 4.8/5.0 |

Students have also provided the following general comments on this course:

- *"Most valuable ... was seeing the picture of sustainability from all the differing viewpoints of other students."*
- *"Great – I enjoyed doing this course"*
- *"Loved the big picture thinking and the 'lights on' feeling"*
- *"The course opens your mind so much and the reference material is excellent"*
- *"Thoroughly enjoyed the course".*