



## **School of Agricultural and Resource Economics**

### **Unit Outline**

#### **Unit: Agricultural Systems and Extension COMM3306**

**Credit points: 6**

**Semester: Two**

**Campus and Mode: Crawley (Internal)**

**Unit Coordinator: Graeme Doole**

**Revised and Updated: 15 May 2007**

**All material reproduced herein has been copied in accordance with and pursuant to a statutory licence administered by Copyright Agency Limited (CAL), granted to the University of Western Australia pursuant to Part VB of the Copyright Act 1968 (Cth).**

**Copying of this material by students, except for fair dealing purposes under the Copyright Act, is prohibited. For the purposes of this fair dealing exception, students should be aware that the rule allowing copying, for fair dealing purposes, of 10% of the work, or one chapter/article, applies to the original work from which the excerpt in this course material was taken, and not to the course material itself**

**© The University of Western Australia 2001**

## Introduction

Scientific research is often based on individual disciplines. However, agricultural and natural resource problems usually require the integration of information and skills from many disciplines and sources. This unit adopts a systems approach for considering such problems. You will apply this approach to deliver information that is most useful for improving decision making by land managers. Development of practical skills in extension practice is promoted by a strong focus on problem based learning in which facilitation, leadership, and communication play major roles. Problem based learning exercises are related to real-life issues of significant importance to agricultural production and sustainable land use. Also, guest speakers provide perspectives on current extension issues in Western Australia and indicate important lessons for professional practice. The communication skills developed in this unit are broadly applicable, especially in those disciplines within agricultural science.

## Goal

The goal of this unit is to develop your ability to contribute to improved management of natural and agricultural resources through the application of knowledge and skills in agricultural systems and extension.

## Broad Learning outcomes

On completion of this unit you should be able to:

- Apply knowledge of extension and adoption processes to the development of extension initiatives in agriculture and natural resource management.
- Demonstrate practical extension and communication skills required to effectively work with groups and communicate with decision makers.
- Recognise and respond to social and economic factors that may influence decision making within agricultural systems.

## Unit-specific prerequisites

Science, Industry, and Community 700.301

## Technical Requirements

Not applicable.

## Software Requirements

This course will require access to Microsoft Powerpoint for the development of a number of presentations. Other programmes requiring Microsoft Excel to function will be provided in tutorials and by e-mail.

## Contact details

Name of Unit coordinator: Graeme Doole
School: Agricultural and Resource Economics
e-mail: <a href="mailto:gdoole@cyllene.uwa.edu.au">gdoole@cyllene.uwa.edu.au</a>
Phone: 6488 3419
Fax: 6488 1098
Room number: G.029

Consultation hours: Any time (appointment recommended)	
<b>Other Teaching Staff</b>	
Name: Coral Pepper	
e-mail: cpepper@cyllene.uwa.edu.au	
Lecture times:	Refer to UWA timetable on the UWA Web page: <a href="http://www.timetable.uwa.edu.au/">http://www.timetable.uwa.edu.au/</a>
Lab/prac/tute times:	Refer to UWA timetable and advice from the unit coordinator

## Unit structure summary

### Lectures

Lecture sessions will be held on Mondays 11 AM-12.45 PM in the ARTS Lecture Room 10.

### Practical and/or laboratory sessions

Tutorial sessions requiring computers will be held on Tuesdays 4-5.45 PM in the Agriculture Computer Lab.

Tutorial sessions not requiring computers will be held on Tuesdays 4-5.45 PM in GPB3:202.

### Tutorials

See description under "Practical and/or laboratory sessions" heading.

### Workshops

Not applicable.

### Other

Not applicable.

## Unit schedule

Week	Topics	Tutorial topics
<b>Agricultural production</b>		
1	Introduction to agricultural systems. Extension models.	Decision support tools.
2	Principles of adult learning.	Decision support tools.
3	Adoption of innovations.	Decision support tools.
4	Challenges to effective extension.	Introduction to problem based learning.
5	Farmer-based extension practices.	Facilitated group meetings.
6	Media communication.	Facilitated group meetings.
7	Private information delivery and consultancy.	Facilitated group meetings.
<b>Natural resource management</b>		
8	Engaging communities in NRM projects.	Group presentations.
9	Indigenous values in NRM.	Decision support tools.
10	Implementation of CDI programmes.	Decision support tools.
11	Farmer-led research and development. Group skills.	Facilitated group meetings.
12	Improving extension for NRM projects.	Facilitated group meetings.
13	Effective delivery of group-based extension	Group presentations.

	programmes.	
--	-------------	--

More detail will be provided in the course outline handed out in the first lecture.

## References, resources and reading materials

### Recommended/required text(s)

There is no recommended text. However, you will be required to read from reading lists provided during the course. Also, assignments will require self-directed research in which wide reading is encouraged.

### Additional/suggested/alternative text(s)

Not applicable.

### Journals

Not applicable.

### Closed reserve

Not applicable.

### Databases

Not applicable.

### Web sites

Relevant websites will be distributed by e-mail throughout the semester.

### Unit web site

Unit materials will be available from the unit WebCT site.

## Assessment

Component	Weight	Important dates
1. Decision support exercise I	15%	Due 21 August.
2. Problem based learning exercise I	45%	Due 18 September.
3. Decision support exercise II	15%	Due 9 October.
4. Problem based learning exercise II	25%	Due 22 October.

## Details of Assessment

Assignments 1 and 3 should be placed in the 4<sup>th</sup> year assignment box in the foyer outside the School of Agricultural and Resource Economics office. Your assignments are to be submitted by 5 PM on the date due and must have the FNAS coversheet completed and stapled to the front of it. The Faculty policy regarding late assignments is written on this coversheet and applies to these assignments.

Assignments 2 and 4 are assessed via group presentations and the submission of written documents in the scheduled tutorials on 18 September and 22 October respectively. These written documents must have the FNAS coversheet completed and stapled to the front of them.

### Practical/tutorial exercises/activities

Not applicable.

### Assessment 1

Assessment 1 will be handed out in the tutorial on 21 July. This involves an exercise using a popular decision support tool for farmers in the wheatbelt of Western Australia.

## **Assessment 2**

Assessment 2 will be handed out in the lecture on 20 August. This involves a problem based learning exercise concerning the construction of an extension programme for a new pasture legume developed for Western Australian agriculture.

## **Assessment 3**

Assessment 3 will be handed out in the tutorial on 25 September. This involves the application of a decision support tool constructed to analyse the profitability of different methods of reducing the economic impact of a common NRM issue.

## **Assessment 4**

Assessment 4 will be handed out in the tutorial on 2 October. This involves a problem based learning exercise concerning the management of a complex NRM issue.

## **Final Exam**

There is no final exam.

## **Plagiarism**

All forms of cheating, plagiarism and copying are condemned by the University as unacceptable behaviour. The Faculty's policy is to ensure that no student profits from such behaviour. Generally a failure will be recorded for the subject in which the cheating has occurred. Serious cases shall be referred to the University's Board of Discipline. All students should note that cases of copying are automatically reported to the Dean and documentary evidence along with associated correspondence is placed on the student's permanent record

## **Appeals against academic assessment**

Full regulations governing appeals procedures are available in the University Handbook, available online at <http://www.publishing.uwa.edu.au/handbooks/interfaculty/PFAAAA.html>

## **Charter of student rights**

See: [http://www.guild.uwa.edu.au/info/student\\_help/student\\_rights/charter.shtml](http://www.guild.uwa.edu.au/info/student_help/student_rights/charter.shtml)

## **Guild student centre contact details**

See: [http://www.guild.uwa.edu.au/info/student\\_help/contact/index.shtml](http://www.guild.uwa.edu.au/info/student_help/contact/index.shtml)

## **Supplementary Information**

Not applicable.