

Course profile – LAND 3003

Course code	LAND 3003	Course name	Land Utilisation
Faculty or school	Land and Food Sciences / Natural and Rural Systems Management		
Units	2	Committed student hours/week (or contact hours and locations)	2 lectures (Mondays 16:00-17:50, in 83-324), Practicals (<u>Field Excursion</u> : Scheduled for 19 th to 23 rd July 2004)
Year of offering	3rd	Semester(s) offered	1
Teaching and learning modes (e.g. internal / external / flexible) Internal			
Course coordinator (name)	Dr Gunnar Kirchhof School of Land and Food Sciences		
Other contributors (if relevant)	Dr Colin Brown School of Natural and Rural Systems Management		

Brief description

Any economic development – rural, urban or industrial – transforms or impacts on our land. Subsequent changes to our land can only be predicted and assessed, benefits maximised and potential damages minimised if the factors that control or influence land use options are understood.

The course covers physical, biological, social and economic factors that determine land use, capability, and how these different factors are connected and affect land use decisions. An important aspect of this course is the examination of environmental, economic and social consequences of the use of land for agriculture and other purposes.

Objectives

1. Gain a thorough understanding of the biophysical factors that control land utilisation
2. Gain an understanding of economic concepts that help explain land use patterns
3. Critically assess and advise on suitable land use options
4. Appreciate that rural, ecological, economic and social and economic land use factors cannot be seen in isolation

Graduate attributes

Learning Outcomes/Course Objectives	Teaching and Learning Styles	Assessment Activities	Graduate Attributes Developed
<ul style="list-style-type: none"> • A comprehensive and well-founded knowledge of different types of land use related resources • A global perspective of the biophysical factors affecting land use. • A thorough understanding of economic concepts that help explain land use 	<ul style="list-style-type: none"> • Lectures • Self study. 	<ul style="list-style-type: none"> • Final Examination 	In-depth knowledge of the field of study
<ul style="list-style-type: none"> • Analysis of current land uses and critically evaluate their advantages and disadvantages • Assess land uses and provide advice for appropriate land management 	<ul style="list-style-type: none"> • Field excursion 	<ul style="list-style-type: none"> • Assignment 	Effective communication
<ul style="list-style-type: none"> • Identify and assess land use • Evaluate land use and suggest alternative land use options 	<ul style="list-style-type: none"> • Lectures • Field excursion 	<ul style="list-style-type: none"> • Assignment 	Independence and creativity
<ul style="list-style-type: none"> • Analyse current land uses and objectively demonstrate benefits and disadvantages 	<ul style="list-style-type: none"> • Field excursion 	<ul style="list-style-type: none"> • Assignment 	Critical judgement
<ul style="list-style-type: none"> • Report on land uses and advise on appropriate land management • Understand that the way we utilise our land has direct or indirect consequences on the well being of future generations 	<ul style="list-style-type: none"> • Field excursion • Lectures 	<ul style="list-style-type: none"> • Assignment 	Ethical and social understanding

Assumed background

- Basic knowledge (high school level) of mathematics, chemistry and biology

Introduction to staff

Dr Gunnar Kirchhof is a lecturer in Land Resource Science. He has extensive research experience in the areas of soil management and landscape processes in tropical and temperate regions, with a strong interest in sustainable systems.

Contact: Room 236 Hartley Teakle Bldg, (07) 3365-1364,
Email g.kirchhof1@uq.edu.au

Dr Colin Brown is a senior lecturer in agricultural economics. He has extensive research experience in the areas of land use policy and management as well as regional economics in both China and Australia.

Contact: Room 541 Hartley Teakle Bldg, (07) 3365 – 2148,
Email Colin.brown@uq.edu.au

Required texts/resources

Not applicable

Recommended texts/resources

Yencken D, Wilkinson D 2000. *Resetting the compass: Australia's journey towards sustainability*. Collingwood, Vic : CSIRO Publishing. (QH77.A8 Y46 2000)

Australia state of the environment 1996 : an independent report presented to the Commonwealth Minister for the Environment / by the State of the Environment Advisory Council. Collingwood, Vic.: CSIRO Publishing, 1996. (HC610.E5 A87 1996)

Australia, state of the environment 2001 [electronic resource] / Australian State of the Environment Committee. Melbourne : CSIRO Publishing, 2001. (HC610.E5 A87 2001 sup.1)

Also available at:

<http://www.deh.gov.au/soe/2001/index.html>

For the economics component of the course, the main study material/readings will come from various chapters in:

Barlowe, R. (1986) *Land Resource Economics - The Economics of Real Estate*, Prentice-Hall, Englewood Cliffs. {HD111.B25 1986}

Additional study material and suggested readings will be provided in the course notes on the WebCT site.

Course home page/WebCT site

The WebCT page for this course is the main communication channel between Teaching staff and students besides lectures and practical sessions. All announcements will be made through the WebCT and during lectures.

Student support

Important information on examinations and support services can be found on the web at <http://www.uq.edu.au/nravs/> and the Student Support Services site at <http://www.sss.uq.edu.au/>

Any student with a disability who may require alternative academic arrangements in the course is encouraged to seek advice at the commencement of the semester from a Disability Adviser at Student Support Services.

How to study this course

Lectures provide the basic fundamental knowledge required towards developing skills in land use. The field excursion to the Darling Downs is designed as a case study to learn and experience some the fundamental processes that underpin land use. Participation of students in all aspects are essential as part of the learning process. Students are advised to allow for own study time before and after lectures. As a guide, for each hour lecture students should plan at least around 2 hours of individual study time. Course notes will be placed on the course WebCT

Study chart

Lectures are Mondays, 16:00-17:50h, in 83-324 (changes TBA)

Land Utilisation				
week	week starting	theme	topics	lecturer
1	Monday, 1 March 2004	Introduction	Factors affecting land use	Gunnar
2	Monday, 8 March 2004	Land use and climate	Global climate and land use	Gunnar
3	Monday, 15 March 2004	Climatic resources	Australian climate and land use	Gunnar
4	Monday, 22 March 2004	Land resources	Soils and landscapes, soil classification and use of thematic maps	Gunnar
5	Monday, 29 March 2004	Water resources	Global and Australian water resources, water cycle, salinity	Gunnar
6	Monday, 5 April 2004	Biotic resources	Exotic species and diseases, impact on the Australian landscape, Economic growth and biophysical limitations,	Gunnar
	Monday, 12 April 2004	Easter Monday		
7	Monday, 19 April 2004	Land economic approach to investigating land utilisation	Framework for examining land use, facets of land, 'best' use of land	Colin
8	Monday, 26 April 2004	Anzac Day		
9	Monday, 3 May 2004	Labor Day		
10	Monday, 10 May 2004	Land as a factor of production	Combining land with other factors of production	Colin
11	Monday, 17 May 2004	Land rent and use capacity	Economic returns and land use, use capacity	Colin
12	Monday, 24 May 2004	Comparative advantage, specialization and land use, spatial dimensions of land use	Absolute versus comparative advantages, regional specialization, location and land use, location rents, spatial patterns of land use	Colin
13	Monday, 31 May 2004	case studies including land use policy	China and Australia	Colin

Assessment details

Summary

Item no.	Weighting	Details	Due date
Theory	70 %	<p>The lectures provide the background material and theory for the course and indicate the scope of material potentially examinable. The entire lecture is examinable. However, detailed knowledge of statistical figures will not be examined (e.g. no need to memorise for example absolute values for volumes of water in the Murray Darling Basin), but you are expected to understand mechanisms (for example what impacts on the volume of water flow in the Murray Darling Basin). There is also no need to memorise detailed formulae, but you should be able to explain what certain formulae are used for and what their driving variables are. In short: The examination will focus on the understanding of the concepts and mechanisms presented in the lectures mechanisms and deduction and not on memorising factual knowledge that is readily available from reference catalogues.</p> <p>In the economics component of the course, exercises (questions) will be listed for each topic. Students are expected to be able to answer these exercises as they will form the basis of the exam questions.</p>	Examination period, semester 1, 2004
Assignment	30 %	The assignment will test how well you were able to apply the theory from the lectures to 'real life' conditions. It will also show how well you are able to communicate your work to others.	The assignment will be due approximately 6 weeks after the excursion (i.e Friday 3rd September 2004)

Theory:

Final Examination (2 hour examination, essay type questions in two parts of equal value: biophysical and economic component of the course. Each component has 5 questions where you must answer 3). You must attend the final examination to fulfil the requirement of the course. The exam counts for 70% of the marks. Calculators and dictionaries are not allowed.

Assignment:

The assignment is closely related to the field excursions. The assignment topic will be given at the start of the excursion. It includes a brief summary of the excursion and a thorough discussion of topic related to the excursion. This discussion is based on your own observation during the field trip, researching related literature and your objective and substantiated conclusion. The assignment is due 6 weeks after the excursion. As a guide the length of the assignment should be around 3000 words. Assignment topics will be given at the start of the excursion. An assignment of an acceptable standard is

required before the requirements of the course are fulfilled. You must complete the assignment to fulfil the requirement of the course

A variation in assessment is possible for students with a disability (see HUPP 3.30.3 Special Arrangements for Examinations for Students with a Disability).

Other requirements

Students must attend and complete the examination, attend the excursion and submit the required assignment before they are eligible for a passing grade. Exemption will be granted only on medical grounds (medical certificate required) and not on clashes with other courses.

For students enrolled in the B Agricultural Science program: Practical experience reports. These reports must be handed in to the School of Land and Food Secretariat (Ms Anne Hanson, 83-329) no later than the 20th of August 2004. They must be of an acceptable standard before the final grade for the course will be released.

Outcomes of assessment

The assessments are intended to prepare the students to meet the objectives of this course

Availability of feedback

Drs Gunnar Kirchhof and Colin Brown maintain an open door policy. They are available for student contact through e-mail and WebCT any time, through telephone or in their offices when on site. Students are advised that only their official UQ-e-mail will be used for communication. In some cases ad-hoc meeting are possible, but students are encouraged to give reasonable notice if they wish to meet with the course lecturers.

Assessment guidelines

Assessment policies

- Non-attendance at the field excursion:

In case of illness (or bereavement of a close relative or friend) you may be exempted from attending the excursion. To grant this exemption you must submit a medical certificate (or other documentation) to prove the cause for non-attendance. Note that *ad hoc* excuses (car trouble and the like!) will not be accepted. In case an exemption is granted you will be asked to submit a substantial assignment which will show your ability to self-study and apply your knowledge from the lectures and literature to a topic given to you.

- Non or late submission of assignment

In case of illness (or bereavement of a close relative or friend) you may be allowed to submit your assignment at a later date provided you submit a medical certificate (or other documentation) to prove the delay. If there is no valid reason for late submission the grade for your assignment will drop by one every three days after the due date.

- Non-attendance at the final exam:

You must attend the exam to obtain a passing grade. In case of illness (or bereavement of a close relative or friend) you may be able to do the examination at a later date provided you submit a medical certificate (or other documentation) to prove the cause for non-attendance.

Presentation of assignments

For written work (reports, assignments and reports), assessment will be based on:

Marks	Component
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10%	Introduction (provides a preamble of the topic)
45%	Body (main part dealing with the topic: includes citations if relevant, assessment and evaluation of information, analyses and synthesises information, evaluates other's opinions and suggests alternative views)
20%	Conclusion (states main findings, provides own opinion, or suggests solution to problems)
5%	Evidence of scientific writing (structure and approach)
5%	Evidence of clarity and logic of thought
5%	Definitions of terms used
5%	Effective use of figures, tables and/or appendices if appropriate
5%	Citation of references, Correct spelling, grammar and legibility
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100%	

Plagiarism

Refer to the Library website <http://www.library.uq.edu.au/training/plagiarism.html> or to any other relevant School publication

See HUPP 3.40.12 Plagiarism, see URL:

<http://www.uq.edu.au/hupp/contents/view.asp?s1=3&s2=40&s3=12>

The University has adopted the following definition of plagiarism:

"Plagiarism is the action or practice of taking and using as one's own the thoughts or writings of another, without acknowledgment. The following practices constitute acts of plagiarism and are a major infringement of the University's academic values:

- Where paragraphs, sentences, a single sentence or significant parts of a sentence are copied directly, and are not enclosed in quotation marks and appropriately footnoted;
- Where direct quotations are not used, but are paraphrased or summarised, and the source of the material is not acknowledged either by footnoting or other simple reference within the text of the paper; and
- Where an idea which appears elsewhere in printed, electronic or audio-visual material is used or developed without reference being made to the author or the source of that material."

Excursion

A five day excursion to the south eastern Darling Downs is scheduled from the 19th to 23rd July 2004. Students must attend the excursion.

Assignment

Due date	3 September 2004 (details TBA)
Weighting	30 % of final mark
Word length	3000 words
Topic	TBA during the field excursion

Assessment criteria

The assignment

- Integrates the theory from the lectures with a general and specific topic relating to the excursion.
- Must be combined with a suitable literature study.
- needs to conclude with an objective argument summarising your own observation and published work
- Is not an essay summarising and outlining in chronological sequence where the student group visited.

Exam

The examination will take 2 hour. There will be essay type questions in two parts of equal value: biophysical and economic component of the course. Each component has 5 questions where you must answer 3.

Practical experience reports

For Bachelor of B Agricultural Science program students only: This report will be graded (by Prof Richard Burns, room 83-345) as a 'pass' or 'no pass' and does not affect your final grade.

Final grade

The final grade will be a weighted average out of the 2 required components (exam and assignment). However, if you fail to attend the excursion, fail to submit an acceptable assignment or fail attend the exam you will have not fulfilled the requirements of the course.

Note: Bachelor of B Agricultural Science program students must submit a report summarising their pre-professional work experience. A pass is required for the report in order to fulfil the requirements of the course.