Description: Agricultural Science

SYNOPSIS
A knowledge of agricultural systems is important to professionals in earth and biological science, arts, agriculture and environmental engineering. This is an introductory course in agricultural plant morphology and physiology, grazing and cropping systems, animal production systems, integrated pest management, production economics and agricultural systems management. It also discusses the physical, economic and social constraints to land use and agricultural production, the processes of land degradation, and the principles of property management planning and sustainable farming system management.

OBJECTIVES
The course objectives define the student learning outcomes for a course. The assessment item(s) that may be used to assess student achievement of an objective are shown in parenthesis. On completion of this course, students should be able to:

1. demonstrate an understanding of agricultural systems management and describe the major agricultural production systems in Australia; (Assignment 1; Assignment 2)
2. describe the morphology of crops and pastures of economic significance and demonstrate an understanding of the major crop physiological processes influencing plant production; (Assignment 2; 2 Hour Closed Examination)
3. demonstrate an understanding of the agronomic principles, resource constraints and management practices involved in the production of field and horticultural crops; (Assignment 1; Assignment 2; 2 Hour Closed Examination)
4. demonstrate an understanding of the biological requirements and management practices involved in livestock production systems; (Assignment 2; 2 Hour Closed Examination)
5. demonstrate an understanding of production economics and the marketing of agricultural products; (Assignment 1; Assignment 2; 2 Hour Closed Examination)
6. demonstrate a knowledge of the major land degradation processes affecting the sustainability of agricultural systems; (Assignment 1; 2 Hour Closed Examination)
7. demonstrate an understanding of the principles of sustainable land management, land use planning and property management planning. (2 Hour Closed Examination)

**TOPICS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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<tbody>
<tr>
<td>1. Introduction to agricultural systems</td>
<td>5.00</td>
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<tr>
<td>2. Crop physiology and morphology</td>
<td>20.00</td>
</tr>
<tr>
<td>3. Agronomic principles</td>
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<td>4. Livestock production systems</td>
<td>15.00</td>
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<tr>
<td>5. Agricultural marketing and production economics</td>
<td>15.00</td>
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<tr>
<td>6. Land degradation</td>
<td>10.00</td>
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<tr>
<td>7. Sustainable farming systems and property management planning</td>
<td>15.00</td>
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**TEXT and MATERIALS required to be PURCHASED or ACCESSED**

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).


**REFERENCE MATERIALS**

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.


STUDENT WORKLOAD REQUIREMENTS

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<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Assessment</td>
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<td>Directed Study</td>
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<td>Examinations</td>
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<td>Lectures</td>
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<td>Private Study</td>
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<td>Tutorials</td>
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ASSESSMENT DETAILS

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<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
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<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>200.00</td>
<td>20.00</td>
<td>31 Aug 2007</td>
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<tr>
<td>ASSIGNMENT 2</td>
<td>200.00</td>
<td>20.00</td>
<td>12 Oct 2007</td>
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<tr>
<td>2 HOUR CLOSED EXAMINATION</td>
<td>600.00</td>
<td>60.00</td>
<td>END S2</td>
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NOTES

1. Student Administration will advise students of the dates of their examination during the semester.

IMPORTANT ASSESSMENT INFORMATION

1. Attendance requirements:
   It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2. Requirements for students to complete each assessment item satisfactorily:
   To satisfactorily complete an individual assessment item a student must achieve at least 50% of the marks or a grade of at least C-. (Depending upon the requirements in Statement 4 below, students may not have to satisfactorily complete each assessment item to receive a passing grade in this course.)

3. Penalties for late submission of required work:
   If students submit assignments after the due date without prior approval then a penalty of 20% of the total marks available for the assignment will apply for each working day late.

4. Requirements for student to be awarded a passing grade in the course:
   To be assured of receiving a passing grade a student must submit all of the weighted assessment items; achieve at least 45% in the examination and at least 50% of the total weighted marks available for the course.

5. Method used to combine assessment results to attain final grade:
   The final grades for students will be assigned on the basis of the weighted aggregate of the marks (or grades) obtained for each of the summative assessment items in the course.

6. Examination information:
In a Closed Examination, candidates are allowed to bring only writing and drawing instruments into the examination.

7 Examination period when Deferred/Supplementary examinations will be held:
Any Deferred or Supplementary examinations for this course will be held during the examination period at the end of the semester of the next offering of this course.

8 University Regulations:
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL http://www.usq.edu.au/corporateservices/calendar/part5.htm or in the current USQ Handbook.

ASSESSMENT NOTES

1 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.

2 Students must retain a copy of each item submitted for assessment. This must be despatched to USQ within 24 hours if required by the Examiner.

3 In accordance with University’s Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.

4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.

5 The Faculty will NOT accept submission of assignments by facsimile.

6 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.

7 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner’s convenience.

8 Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded one of the temporary grades: IM (Incomplete - Make up), IS (Incomplete - Supplementary Examination) or ISM (Incomplete -Supplementary Examination and Make up). A temporary grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non directed personal study.

9 Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded IDS (Incomplete - Deferred Examination; IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).