

E266 FARM PRACTICE (YEAR 12) – 2008 - 2009

Introduction

This subject is designed for students who wish to learn about existing and new farming practices. It allows students to develop skills, knowledge and attitudes related to the production and marketing of selected farm products.

The subject outcomes are consistent with the industry competency standards contained within the National Agriculture Training Packages. These enable schools to select and develop those competencies relevant to student interests and local farming systems, thereby providing opportunity for students with additional industry-endorsed recognition of their achievements. Formal recognition of industry-based competencies assists students in gaining employment in agricultural and related industries, and with articulation into further education and training opportunities.

Student achievement of the subject outcomes relies on significant hands-on experience. As appropriate resources are critical in facilitating student achievement, this subject should only be offered where instructors experienced in a range of farm activities are available and where there is access to suitable farm facilities. To achieve the outcomes of this subject there should be sufficient quality and quantity of resources to ensure that occupational health and safety standards are not compromised, and that industry standards for workplace employment or training are met. It is also important that production and marketing of farm products and services are undertaken in accordance with industry requirements.

Rationale

Agricultural industries in Australia are undergoing a continual process of structural adjustment to ensure they remain both economically viable and environmentally sustainable. Farming units are being consolidated and agricultural systems are diversifying and intensifying. The need to develop sustainable land use systems at the farm and regional level is critical to the long-term survival of rural industries.

Australian farmers have been consistently increasing productivity to offset declining profitability and are recognised as being amongst the world's most efficient primary producers. They have achieved this mainly by developing new plant and animal varieties and using improved farming practices and new technology.

Australian farmers are also moving their products and marketing style from a commodity focus towards a focus on differentiated quality specified products. At the same time, they are integrating the farm production activities with downstream processing and marketing activities. Closer integration of the components of the marketing chain between the farm gate and the consumer is seen as critical to the future prosperity of Australian agriculture.

This subject encourages students to develop an appreciation of the diversity of farming practices, to critically evaluate existing and new farming practices

and to develop positive attitudes to the need for changes in farming practices.

Subject Design

This subject stipulates a set of outcomes. These describe what the student can do as a result of studying the subject. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

A set of components is listed under each outcome. These components are specified for the development of each outcome and indicate how students will demonstrate achievement of the outcome in this subject. The teaching/learning program will give coverage to all components in order to ensure each outcome is appropriately addressed.

If schools wish to vary these components they may do so, provided it can be demonstrated that the outcomes are still able to be achieved and that the subject is still assessed through the common assessment framework described for the subject. Proposals for variations must be submitted to the Curriculum Council for approval.

The assessment framework, based on a series of generally defined common assessment tasks, has been stipulated for the subject. Each task measures student performance on a subset of the subject outcomes. A generalised set of performance criteria supports the assessment framework.

A procedure for rating student performance on each outcome and allocating grades has also been stipulated.

Subject Outcomes

Within the context of Farm Practice the student is provided with opportunities to achieve each of the following outcomes:

- Outcome 1:** Identifies and implements animal production practices that reflect recognised management principles.
- Outcome 2:** Identifies and implements plant production practices that reflect recognised management principles.
- Outcome 3:** Assesses risk and operates within industry-specific occupational safety and health and ethical standards.
- Outcome 4:** Functions effectively as an individual, or in a team, using an understanding of enterprise and workplace requirements.
- Outcome 5:** Contributes to planning and achievement of personal and group goals.
- Outcome 6:** Selects, uses and presents information relevant to farming practices.
- Outcome 7:** Selects and uses equipment appropriate to meeting specified standards in farming practices.
- Outcome 8:** Explains how farming practices are developed and modified to meet economic, environmental, social and technological needs.

Components of Outcomes

Outcome 1: Identifies and implements animal production practices that reflect recognised management principles.

The following components amplify the context and meaning of the outcome. The student:

- identifies recognised management principles in different animal industries
- implements recognised animal production practices
- monitors husbandry practices to identify possible solutions to problems
- investigates causes of sub-optimal production and proposes appropriate solutions
- expresses an informed personal choice in response to a range of options in an animal production system
- generates a number of possible solutions and presents reasons for adopting or discarding those solutions
- applies preventative and/or controlling measures for a disease/disorder.

Outcome 2: Identifies and implements plant production practices that reflect recognised management principles.

The following components amplify the context and meaning of the outcome. The student:

- identifies recognised management principles in different plant industries
- implements recognised plant production practices
- monitors horticultural practices to identify possible solutions to problems
- investigates causes of sub-optimal production and proposes appropriate solutions
- expresses an informed personal choice in response to a range of options in a plant production system.
- generates a number of possible solutions and presents reasons for adopting or discarding those solutions
- applies preventative and controlling measures for a disease/disorder.

Outcome 3: Assesses risk and operates within industry-specific occupational safety and health and ethical standards.

The following components amplify the context and meaning of the outcome. The student:

- identifies the occupational safety and health and ethical standards appropriate to farming industries
- assesses and responds to risks related to work situations associated with farm practices
- considers ethical issues in the production and marketing of plants and animals
- assesses the necessity of destroying an animal and describes humane destruction and environmentally sound disposal methods
- outlines responsibilities for workplace safety and health when working in farm practices
- works within enterprise occupational safety and health standards.

Outcome 4: Functions effectively as an individual, or in a team, using an understanding of enterprise and workplace requirements.

The following components amplify the context and meaning of the outcome. The student:

- understands and abides by workplace relationships and conditions
- carries out assigned duties effectively as an individual and in a team
- plans daily work routines
- seeks and uses information to solve workplace problems
- communicates and cooperates effectively in the workplace
- demonstrates persistence, autonomy and flexibility when working.

Outcome 5: Contributes to planning and achievement of personal and group goals.

The following components amplify the context and meaning of the outcome. The student:

- plans and appraises personal and group goals
- demonstrates self-management skills
- interacts effectively with others
- participates collaboratively to achieve goals
- demonstrates leadership skills
- develops and strives for productive work relationships
- uses appropriate interpersonal skills to achieve goals.

Outcome 6: Selects, uses and presents information relevant to farming practices.

The following components amplify the context and meaning of the outcome. The student:

- collects and uses information which supports retention, rejection or modification of farming practices
- systematically collects and analyses information on or about whole farm and enterprise performance
- presents findings from a trial of farming practices
- presents a summary of the performance of farming practices.

Outcome 7: Selects and uses equipment appropriate to meeting specified standards in farming practices.

The following components amplify the context and meaning of the outcome. The student:

- identifies relevant industry standards in selected farm practices
- identifies design features of equipment and structures that enable farm practice standards to be achieved
- analyses against specific standards the efficiency and effectiveness of farm-related equipment and structures
- justifies proposed design changes to equipment and structures based on changes in practices
- recognises that changes to equipment and physical structures has implications for production/marketing systems.

Outcome 8: Explains how farming practices are developed and modified to meet economic, environmental, social and technological needs.

The following components amplify the context and meaning of the outcome. The student:

- explains how individual, community and environmental needs are met by farming practices
- identifies the social, economic and environmental issues associated with farming practices
- analyses the effects of social, economic, technological and environmental changes on selected farming practices
- generates a range of possible responses to a given change and examines the merits of the most appropriate response
- identifies relationships between technological, social, economic and environmental factors.

Common Assessment Framework

The framework outlined below specifies a series of common assessment tasks for this subject. The teacher has the flexibility to select from the Farm Practice outcomes those to be assessed in each task. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

Each common assessment task measures student performance on a subset of subject outcomes. For each outcome measured in a task, student performance will be rated as Very High (V), High (H), Satisfactory (S) or Not Demonstrated (ND).

Task and Task Description

The term “task” should not be confused with “project”. Each task may not be a separate individual project but a broad description of the type of activity that the student is to complete to satisfy the specified outcomes within that task. The organisation and number of projects is up to the individual school, as long as all tasks are covered during the subject.

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Task	Outcomes	Task Description
One	The instructor has the flexibility to select from the Farm Practice outcomes, those to be assessed in each task, however Outcome 3 must be assessed in all tasks.	Animal Production and Marketing Demonstrates competence in planning and performing a range of skills required to produce and market animals and animal products.
Two		Plant Production and Marketing Demonstrates competence in planning and performing a range of skills required to produce and market plants and plant products.
Three		Farm Vehicles, Machinery, Equipment and Structures Demonstrates competence in a range of skills required to select, operate, install, maintain and/or repair a range of vehicles, machinery, equipment and structures used to produce and market farm products and services.
Four		Workplace Employment Requirements Demonstrates competence in meeting workplace and industry employment requirements, planning daily work routines and displaying leadership skills.

The above set of tasks represent assessable activities that would be undertaken within a range of projects defined at the commencement of the subject.

Common Assessment Task Booklet

The *Common Assessment Tasks* booklet that accompanies this subject further describes each task, and defines parameters for its completion. Schools are free to determine specific assessment details within these parameters. Copies of the *Common Assessment Tasks* booklet are available from the Curriculum Council and can be found, with the syllabus for this subject, on the Curriculum Council home page (<http://www.curriculum.wa.edu.au>).

Performance Criteria

Outcome 1: Identifies and implements animal production practices that reflect recognised management principles.

Satisfactory	High	Very High
Identifies and implements animal production practices that reflect recognised management principles.	Selects, undertakes and justifies animal production practices that reflect recognised management principles.	Selects, undertakes and evaluates the effectiveness of animal production practices that reflect recognised management principles.

Outcome 2: Identifies and implements plant production practices that reflect recognised management principles.

Satisfactory	High	Very High
Identifies and implements plant production practices that reflect recognised management principles.	Selects, undertakes and justifies plant production practices that reflect recognised management principles.	Selects, undertakes and evaluates the effectiveness of plant production practices that reflect recognised management principles.

Outcome 3: Assesses risk and operates within industry-specific occupational safety and health and ethical standards.

Satisfactory	High	Very High
Assesses risk and operates within industry-specific occupational safety and health and ethical standards.	Adopts practices appropriate to circumstances and justifies how they meet industry-specific occupational safety and health and ethical standards.	Evaluates and refines practices to better carry out industry-specific occupational safety and health and ethical standards.

Outcome 4: Functions effectively as an individual, or in a team, using an understanding of enterprise and workplace requirements.

Satisfactory	High	Very High
The student understands and abides by workplace requirements and works effectively with minimal supervision.	The student independently and consistently abides by workplace requirements and works effectively in a range of situations.	The student independently and consistently abides by workplace requirements, plans and implements daily routines, and resolves problems that may arise.

Outcome 5: Contributes to planning and achievement of personal and group goals.

Satisfactory	High	Very High
Contributes to planning and achievement of personal and group goals.	Participates in effective and efficient decision-making processes leading to achievement of personal and group goals.	Demonstrates leadership and organisational skills that enhance the achievement of personal and group goals.

Outcome 6: Selects, uses and presents information relevant to farming practices.

Satisfactory	High	Very High
Selects, uses and presents information relevant to meeting needs in farming practices.	Selects, manipulates and presents information to achieve particular effects and meaning when meeting needs in farming practices.	Adapts and/or creates information products and processes to negotiated standards when meeting needs in farming practices.

Outcome 7: Selects and uses equipment appropriate to meeting specified standards in farming practices.

Satisfactory	High	Very High
Selects and uses equipment appropriate to meeting specified standards in farming practices.	Selects, uses and justifies the appropriateness of equipment when meeting specified standards in farming practices.	Evaluates the efficiency and effectiveness of selected equipment, making and justifying modifications where necessary, to meet specifications.

Outcome 8: Explains how farming practices are developed and modified to meet economic, environmental, social and technological needs.

Satisfactory	High	Very High
Explains how farming practices are developed and modified to meet economic, environmental, social and technological needs.	Proposes and justifies adaptations to farming practices to improve the economic, environmental, social and technological impacts.	Plans appropriate action to resolve some economic, environmental, social and technological issues, and justifies decisions made.

Rating Procedure

Before a final grade can be awarded, the final rating achieved for each outcome must be determined. This is done using the following process:

- V is attained when at least 50% of ratings are at a Very High level, and at least 50% of the remainder are at a High level or better.
- H is attained when at least 50% of ratings are at a High level or better, and at least 50% of the remainder are at a Satisfactory level or better.
- S is attained when at least 50% of ratings are at a Satisfactory level or better.
- ND is attained when more than 50% of ratings are at a Not Demonstrated level.

Where a student fails to achieve a final rating of S for an outcome, teachers are encouraged to provide the student with an additional opportunity to demonstrate S if:

- the student has completed all the CATs incorporating that outcome; and
- the student has demonstrated S for that outcome in at least one task.

The additional opportunity should not simply be a repetition of a task, but should be an equivalent task which reflects a change of context in which the task is done.

Professional judgement should then be used to determine whether a final rating of ND or S is appropriate in each situation.

Grading Procedure

At the completion of this subject, grades will be awarded in the following manner:

- A Very High in at least 50% of outcomes, and High or better in at least 50% of the remainder.
- B High or better in 50% of outcomes, and Satisfactory or better in the remainder.
- C Satisfactory or better in all outcomes.
- D Satisfactory or better in at least 50% of the outcomes.
- E Not Demonstrated in more than 50% of the outcomes.

A final rating of ND for any outcome will result in a grade of D being awarded.

Specific details giving examples of the combination of V, H and S resulting in different grades can be found in the *Common Assessment Tasks* booklet.

Time Allocation

The subject has been designed to be completed through a structured education program of approximately 110 hours in any suitable contexts and series of learning experiences. Typically the subject will be studied over the period of one school year. For administrative reasons schools wishing to vary this delivery pattern (e.g. over a shorter period or over a longer period up to two school years) are required to notify the Chief Executive Officer of the Curriculum Council.

Subject Completion

Students must complete the school's structured educational and assessment program for a subject in order to be eligible to receive a grade unless there are exceptional and justifiable circumstances. In situations where the school considers that insufficient information has been gathered to justify the award of a grade for the subject, a result of U (for unfinished) should be allocated. The Curriculum Council offers the flexibility for the U to be converted to a grade after the final grades have been submitted. Further details on assessment and grading are provided in Volume I of the Syllabus Manuals.

