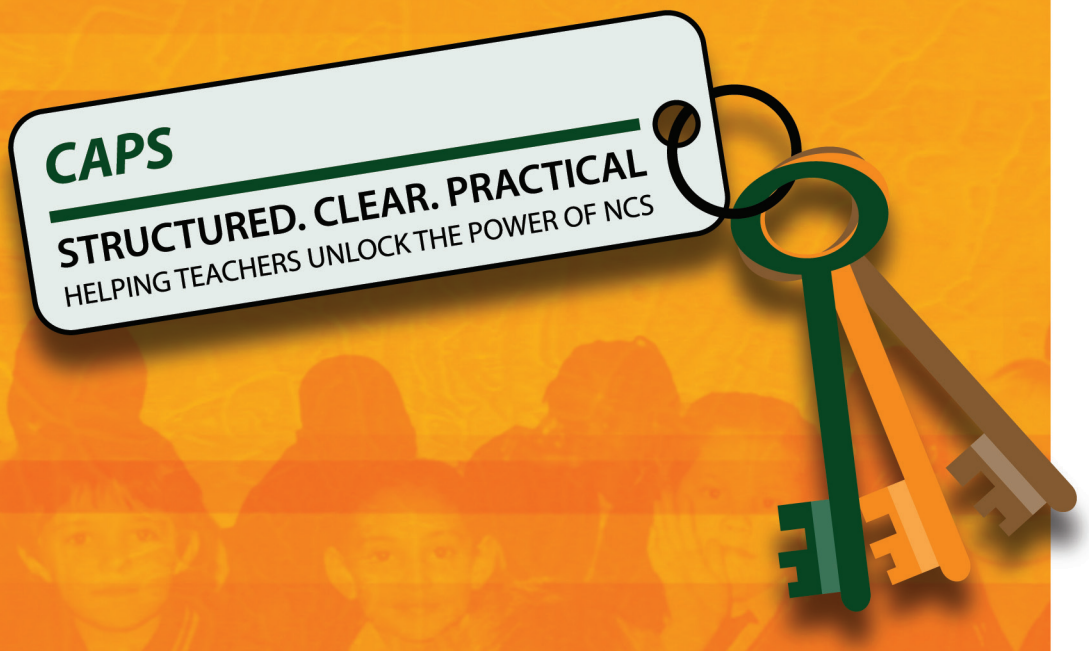
AGRICULTURAL MANAGEMENT PRACTICES

National Curriculum Statement (NCS)

Curriculum and Assessment Policy Statement



Further Education and Training Phase Grades 10-12

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CURRICULUM AND ASSESSMENT POLICY STATEMENT
GRADES 10-12

AGRICULTURAL MANAGEMENT PRACTICES

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FOREWORD BY THE MINISTER

Our national curriculum is the culmination of our efforts over a period of seventeen years to transform the curriculum bequeathed to us by apartheid. From the start of democracy we have built our curriculum on the values that inspired our Constitution (Act 108 of 1996). The Preamble to the Constitution states that the aims of the Constitution are to:

- heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
- improve the quality of life of all citizens and free the potential of each person;
- lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law; and
- build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations.

Education and the curriculum have an important role to play in realising these aims.

In 1997 we introduced outcomes-based education to overcome the curricular divisions of the past, but the experience of implementation prompted a review in 2000. This led to the first curriculum revision: the *Revised National Curriculum Statement Grades R-9* and the *National Curriculum Statement Grades 10-12* (2002).

Ongoing implementation challenges resulted in another review in 2009 and we revised the *Revised National Curriculum Statement* (2002) to produce this document.

From 2012 the two 2002 curricula, for *Grades R-9* and *Grades 10-12* respectively, are combined in a single document and will simply be known as the *National Curriculum Statement Grades R-12.* The *National Curriculum Statement for Grades R-12* builds on the previous curriculum but also updates it and aims to provide clearer specification of what is to be taught and learnt on a term-by-term basis.

The *National Curriculum Statement Grades R-12* accordingly replaces the Subject Statements, Learning Programme Guidelines and Subject Assessment Guidelines with the

(a) Curriculum and Assessment Policy Statements (CAPS) for all approved subjects listed in this document;

(b) *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*; and

(c) *National Protocol for Assessment Grades R-12.*

MRS ANGIE MOTSHEKGA, MP
MINISTER OF BASIC EDUCATION

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SECTION 1

INTRODUCTION TO THE CURRICULUM AND ASSESSMENT POLICY STATEMENTS FOR LIFE ORIENTATION GRADES 10-12

1.1 Background

The *National Curriculum Statement Grades R-12 (NCS)* stipulates policy on curriculum and assessment in the schooling sector.

To improve implementation, the National Curriculum Statement was amended, with the amendments coming into effect in January 2012. A single comprehensive Curriculum and Assessment Policy document was developed for each subject to replace Subject Statements, Learning Programme Guidelines and Subject Assessment Guidelines in Grades R-12.

1.2 Overview

(a) The *National Curriculum Statement Grades R-12 (January 2012)* represents a policy statement for learning and teaching in South African schools and comprises the following:

(i) Curriculum and Assessment Policy Statements for each approved school subject;

(ii) The policy document, National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12; and

(iii) The policy document, National Protocol for Assessment Grades R-12 (January 2012).

(b) The *National Curriculum Statement Grades R-12 (January 2012)* replaces the two current national curricula statements, namely the

(i) Revised National Curriculum Statement Grades R-9, Government Gazette No. 23406 of 31 May 2002, and

(ii) National Curriculum Statement Grades 10-12 Government Gazettes, No. 25545 of 6 October 2003 and No. 27594 of 17 May 2005.

(c) The national curriculum statements contemplated in subparagraphs b(i) and (ii) comprise the following policy documents which will be incrementally repealed by the *National Curriculum Statement Grades R-12 (January 2012)* during the period 2012-2014:

(i) The Learning Area/Subject Statements, Learning Programme Guidelines and Subject Assessment Guidelines for Grades R-9 and Grades 10-12;

(ii) The policy document, National Policy on assessment and qualifications for schools in the General Education and Training Band, promulgated in Government Notice No. 124 in Government Gazette No. 29626 of 12 February 2007;

(iii) The policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), promulgated in Government Gazette No.27819 of 20 July 2005;

(iv) The policy document, An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), regarding learners with special needs, published in Government Gazette, No.29466 of 11 December 2006, is incorporated in the policy document, National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12; and

(v) The policy document, An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), regarding the National Protocol for Assessment (Grades R-12), promulgated in Government Notice No.1267 in Government Gazette No. 29467 of 11 December 2006.

(d) The policy document, *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*, and the sections on the Curriculum and Assessment Policy as contemplated in Chapters 2, 3 and 4 of this document constitute the norms and standards of the *National Curriculum Statement Grades R-12.* It will therefore, in terms of *section 6A* of the *South African Schools Act, 1996 (Act No. 84 of 1996,)* form the basis for the Minister of Basic Education to determine minimum outcomes and standards, as well as the processes and procedures for the assessment of learner achievement to be applicable to public and independent schools.

1.3 General aims of the South African Curriculum

(a) The *National Curriculum Statement Grades R-12* gives expression to the knowledge, skills and values worth learning in South African schools. This curriculum aims to ensure that children acquire and apply knowledge and skills in ways that are meaningful to their own lives. In this regard, the curriculum promotes knowledge in local contexts, while being sensitive to global imperatives.

(b) The National Curriculum Statement Grades R-12 serves the purposes of:

- equipping learners, irrespective of their socio-economic background, race, gender, physical ability or intellectual ability, with the knowledge, skills and values necessary for self-fulfilment, and meaningful participation in society as citizens of a free country;
- providing access to higher education;
- facilitating the transition of learners from education institutions to the workplace; and
- providing employers with a sufficient profile of a learner's competences.

(c) The National Curriculum Statement Grades R-12 is based on the following principles:

- Social transformation: ensuring that the educational imbalances of the past are redressed, and that equal educational opportunities are provided for all sections of the population;
- Active and critical learning: encouraging an active and critical approach to learning, rather than rote and uncritical learning of given truths;
- High knowledge and high skills: the minimum standards of knowledge and skills to be achieved at each grade are specified and set high, achievable standards in all subjects;

- Progression: content and context of each grade shows progression from simple to complex;
- Human rights, inclusivity, environmental and social justice: infusing the principles and practices of social and environmental justice and human rights as defined in the Constitution of the Republic of South Africa. The National Curriculum Statement Grades R-12 is sensitive to issues of diversity such as poverty, inequality, race, gender, language, age, disability and other factors;
- Valuing indigenous knowledge systems: acknowledging the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution; and
- Credibility, quality and efficiency: providing an education that is comparable in quality, breadth and depth to those of other countries.

(d) The National Curriculum Statement Grades R-12 aims to produce learners that are able to:

- identify and solve problems and make decisions using critical and creative thinking;
- work effectively as individuals and with others as members of a team;
- organise and manage themselves and their activities responsibly and effectively;
- collect, analyse, organise and critically evaluate information;
- communicate effectively using visual, symbolic and/or language skills in various modes;
- use science and technology effectively and critically showing responsibility towards the environment and the health of others; and
- demonstrate an understanding of the world as a set of related systems by recognising that problem solving contexts do not exist in isolation.

(e) Inclusivity should become a central part of the organisation, planning and teaching at each school. This can only happen if all teachers have a sound understanding of how to recognise and address barriers to learning, and how to plan for diversity.

The key to managing inclusivity is ensuring that barriers are identified and addressed by all the relevant support structures within the school community, including teachers, District-Based Support Teams, Institutional-Level Support Teams, parents and Special Schools as Resource Centres. To address barriers in the classroom, teachers should use various curriculum differentiation strategies such as those included in the Department of Basic Education's *Guidelines for Inclusive Teaching and Learning* (2010).

1.4 Time Allocation

1.4.1 Foundation Phase

(a) The instructional time in the Foundation Phase is as follows:

SUBJECT	GRADE R (HOURS)	GRADES 1-2 (HOURS)	GRADE 3 (HOURS)
Home Language	10	8/7	8/7
First Additional Language		2/3	3/4
Mathematics	7	7	7
Life Skills • Beginning Knowledge • Creative Arts • Physical Education • Personal and Social Well-being	**6** (1) (2) (2) (1)	**6** (1) (2) (2) (1)	**7** (2) (2) (2) (1)
TOTAL	**23**	**23**	**25**

(b) Instructional time for Grades R, 1 and 2 is 23 hours and for Grade 3 is 25 hours.

(c) Ten hours are allocated for languages in Grades R-2 and 11 hours in Grade 3. A maximum of 8 hours and a minimum of 7 hours are allocated for Home Language and a minimum of 2 hours and a maximum of 3 hours for Additional Language in Grades 1 - 2. In Grade 3 a maximum of 8 hours and a minimum of 7 hours are allocated for Home Language and a minimum of 3 hours and a maximum of 4 hours for First Additional Language.

(d) In Life Skills Beginning Knowledge is allocated 1 hour in Grades R - 2 and 2 hours as indicated by the hours in brackets for Grade 3.

1.4.2 Intermediate Phase

(a) The instructional time in the Intermediate Phase is as follows:

SUBJECT	HOURS
Home Language	6
First Additional Language	5
Mathematics	6
Natural Sciences and Technology	3,5
Social Sciences	3
Life Skills • Creative Arts • Physical Education • Personal and Social Well-being	**4** (1,5) (1) (1,5)
TOTAL	**27,5**

1.4.3 Senior Phase

(a) The instructional time in the Senior Phase is as follows:

SUBJECT	HOURS
Home Language	5
First Additional Language	4
Mathematics	4,5
Natural Sciences	3
Social Sciences	3
Technology	2
Economic Management Sciences	2
Life Orientation	2
Creative Arts	2
TOTAL	**27,5**

1.4.4 Grades 10-12

(a) The instructional time in Grades 10-12 is as follows:

SUBJECT	TIME ALLOCATION PER WEEK (HOURS)
Home Language	**4.5**
First Additional Language	**4.5**
Mathematics	**4.5**
Life Orientation	**2**
A minimum of any three subjects selected from **Group B** Annexure B, Tables B1-B8 of the policy document, *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12,* subject to the provisos stipulated in paragraph 28 of the said policy document.	**12 (3x4h)**
TOTAL	**27,5**

The allocated time per week may be utilised only for the minimum required NCS subjects as specified above, and may not be used for any additional subjects added to the list of minimum subjects. Should a learner wish to offer additional subjects, additional time must be allocated for the offering of these subjects.

SECTION 2

AGRICULTURAL MANAGEMENT PRACTICES

2.1 What is Agricultural Management Practices?

Agricultural Management Practices is the study and application of production, economic and management principles that are used in the cultivation, transformation and marketing of food and other agricultural products. These principles are used to produce and add value to high-quality agricultural products so that these products have economic, aesthetic, social and cultural value.

Agricultural Management Practices draws knowledge and skills from disciplines such as crop sciences; animal sciences; economics and management sciences; engineering; and information and communication technology.

The subject is designed to provide learners with a sound practice-orientated base that integrates theoretical and practical competencies in a way that also incorporates learners with special educational needs (LSEN).

The table below indicates the main topics in the Agricultural Management Practices curriculum.

1. Crop Production and Crop Management
2. Soil and Water Management
3. Product Harvesting and Quality Control
4. Animal Production and Animal Management Aspects
5. Farm Management and Evaluation
6. Value Adding, Processing and Producer Organisations
7. Agri-tourism, Business Planning and Entrepreneurship

The specific production enterprises that are taught in practical situations should be linked to the agro-ecological region.

2.1.1 Learner expectation in Agricultural Management Practices

Learners should be able to:

- understand the social contribution of Agricultural Management Practices to promote a culture of human rights, economic growth and sustainability as a tool for change; improve quality of life; and provide solutions that are responsive to individual and community needs;
- adopt a positive attitude towards rural lifestyles associated with farming;
- help with the management of a farming enterprise and be aware of the discipline that is required by a well-organised farm;
- organise and manage activities responsibly and effectively collect, analyse, critically evaluate and present agricultural information;
- master and apply the skills they gain;

- communicate effectively by using verbal, written, visual, graphical and electronic communication skills and mathematical skills as applied to Agricultural Management Practices;
- be competent, informed and responsible citizens in the field of agriculture, and care for the environment by addressing indigenous knowledge (IK) and social issues;
- think creatively and critically in an agribusiness environment and develop and enhance entrepreneurial skills;
- identify and solve problems by being exposed to the agribusiness management environment;
- care for the environment through the management of natural resources and the acceptable treatment of animals and plants;
- acquire and use relevant technology in agriculture; and
- access and value life-long learning and possible career opportunities.

2.1.2 Time Allocation of Agricultural Management Practices in the curriculum

The teaching time for Agricultural Management Practices is four hours per week/cycle. Two hours must be allocated for theoretical work (50% of the contact time) and two hours for practical work per week/cycle (50% of the contact time). It is advisable that a double period must be allocated per week for practical work. Practical work in the afternoons can be used to complete PAT activities.

Subject	Hours per week	Hours per year	Weeks per year
Agricultural Management Practices	4	160	40

2.1.3 Skills in Agricultural Management Practices

The subject promotes the following skills:

- *management skills*: the knowledge and skills required to plan, organise, guide, control and evaluate production factors to achieve sustainable production enterprises;
- *entrepreneurial skills*: the ability to manage risks and combine production factors creatively to produce superior goods and services;
- *operational skills*: involve the day-to-day management of crop and animal enterprises;
- *marketing skills*: those value-adding activities in the agricultural supply chain that deal with various agricultural production lines, including post-harvesting aspects such as storage, processing, food safety, product packaging and distribution to consumers in domestic and global markets; and
- *research skills*: involve aspects of problem identification; setting objectives; data collection, analysis, evaluation; and report writing.

2.1.4 Requirements to offer Agricultural Management Practices as a subject

It is the responsibility of the school and the Provincial Departments of Education to ensure that there are suitable resources to offer Agricultural Management Practices as a subject.

(a) The school should have:

- access to relevant production enterprises;
- an educator (teacher) to teach Agricultural Management Practices; and
- relevant equipment and tools to use in the crop and animal production systems.

(b) The teachers should have:

- relevant qualification and/or skills and knowledge to teach the subject;
- experience of running an agricultural enterprise; and
- a prescribed textbook for the subject.

(c) Each learner should have:

- a textbook; and
- protective clothing for practical work.

2.2 Overview of the Topic

Topic	Content	
Crop Production and Crop Management	Grade 10	Investigate agricultural crops with regard to the following: • production practices and an overview of the economic importance of crop production; • potential role in industry; • main production areas in the RSA; • production systems; • classification of these crops according to agronomic/horticultural characteristics of their seed and plant; and • main cultivars available for each crop.
	Grade 11	Investigate at least ONE specific agricultural crop with regard to the following: • the main production areas and potential role in industry; • overview of economic importance of this crop; • classification of this crop with regard to agronomic/horticultural characteristics; • growth curve and critical period during its growth; and • most important cultivars available for this selected crop, reasons for use.
	Grade 12	None
Soil and Water Management	Grade 10	FOUR agricultural crops • general climatic requirements (temperature, rainfall, humidity, evaporation and radiation); • collection of weather data; • basic soil aspects; • soil cultivation methods and types of implements; • irrigation; drainage (methods and types); • waste management; and • land care land use and water resources used for agriculture.
	Grade 11	One specific agricultural crop • method of soil sampling and basic soil profile; • basic soil characteristics and properties; • soil cultivation and tillage practices (methods and aims); • irrigation (methods and types); • basic principles in water scheduling; • climatic requirements (precipitation, temperature, evaporation, radiation and humidity); and • the use of weather information.
	Grade 12	Physical farm planning

Topic	Content	
Crop Management	Grade 10	Four agricultural crops • *crop establishment practices*: basic soil preparation practices, plant density, depth and methods (factors influencing each);weeds (types and methods of control); • main diseases (methods or types and control); • main pest (methods, types and control). • crop rotation, monoculture and inter-cropping; • keeping records (financial, physical and production records); • crop protection programmes; and • awareness of relevant legislation.
	Grade 11	One specific agricultural crop • soil and plant analysis, fertilization according to soil analysis and fertilization methods and programme ; • crop establishment practices; • basic principles and terminology (e.g. plant density, depth, planting time, treatment of seed, methods and factors influencing each); • *weeds*: types, identification, prevention and methods of control; • *diseases*: types, identification, prevention and methods of control; • *pests*: types, identification, prevention and methods of control. • principles of crop rotation, monoculture and inter-cropping; • calibration and setting of different farm implements; • methods of crop protection; • precision farming; • manipulation of plant growth (pruning, trellising, green housing, etc.); • record keeping (financial, physical and production records); • crop protection programme; and • production-related legislation, farmer health issues and risk management.
	Grade 12	None
Animal Production	Grade 10	Investigate types of farm animals (e.g. cattle, sheep, pigs and chickens) with regard to the following: • production practices and an overview of the economic importance of production; • potential role in industry; • main production areas in SA; • farming systems; • general classification of these farm animals; and • breeds and latest breeds available in each animal group.
	Grade 11	Investigate at least one specific farm animal with regard to the following: • the economic importance; • potential role in industry; • main areas of production; • Breed standards (evaluating and judging a breed), including: • selection of breeding stock (progeny testing, general appearance and selection procedures); • breeding systems (e.g. cross breeding and inbreeding); and • breeding aids (e.g. stud book registers and production records).
	Grade 12	Harvesting, grading, storage and distribution of crop (practices and principles).

Topic	Content	
Animal Management Aspects	Grade 10	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • handling of farm animals; • care of farm animals; • behaviour of farm animals. • housing and facilities; • after-care of animals (dehorning, removal of extra teats, castration, etc.); • identification methods (earmarks, tattooing, ear tags, etc.); • basic concepts of feeding (classification and terminology). • diseases (identification, types and methods of control); • *parasites*: internal and external (identification, types and methods of control). • keeping records (financial, physical, production and health records); • management programmes; and • awareness of relevant legislation.
	Grade 11	• One specific farm animal • *Reproduction*: aspects of production unit (oestrus, mating, artificial insemination, embryo transplantation, cloning, gestation period and service register); • *Housing and facilities*: types and functions; • *After-care*: dehorning, castration, identification, etc • *Diseases*: types, identification of symptoms, prevention and methods of control; • Animal handling and facilities; • *Basic veterinary practices*: diagnostic procedure, blood smear, blood sample and tissue sample; • *Immunology*: active and non-active; • *Parasitology*: internal and external types, identification, prevention and methods of control. • Feeding aspects according to physiology status; • Requirements, rations, procedures and methods; • Keeping records (physical, production, financial and animal health programmes); • Production-related legislation; • Farmer health issues; Risk management. • If a ruminant is chosen as the farm animal: • objectives of veld management; • *grazing systems*: extensive and intensive principles (selective grazing, non-selective grazing, rotational grazing, etc.); • use (fodder flow planning); • carrying capacity and relevant terminology; and • veld composition and determining carrying capacity.
	Grade 12	

Topic	Content	
Management principles, **Farm planning and Recording**	Grade 10	• Definition of management; • Principles such as: - planning; - control; - co-ordination; - motivation; and - communication.
	Grade 11	• Objectives of veld management • Grazing systems: - extensive and intensive principles (selective grazing, non-selective grazing, rotational grazing, etc.); - use (fodder flow planning); - carrying capacity and relevant terminology; and - veld composition and determining carrying capacity.
	Grade 12	• soil; • camps; • contours; • resource use; • precision farming; • mechanisation; • economic planning (budgets, trial balance, cash flow, and income and expenses statement); • labour planning; • planning regarding implements; • recording (aim, advantages and types of records); • methods of recording (diary, database and palm computer); and • recording financial data (invoice, cheques, depreciation, deposit books and petty cash).
Product harvesting and Quality control	Grade 12	• Product harvesting: - regulations and legal aspects; - handling products; and - storing products. • Quality control measures • Sorting and grading products

Topic	Content	
Marketing, Producer Organisations, Value Adding and Processing	Grade 12	• Marketing of products: • marketing methods and channels; • Marketing Acts; • marketing functions; and • advertising. • Role of producer organisations: • types of organisations; • advantages and disadvantages of organisations; and • the role of the product organisation in the marketing of products. • Value adding: • value-adding methods; • types of products; and • advantages. • Processing: • principles of processing; • advantages; • factors indicating the viability of value. • marketing and control; • Labelling Acts and value adding; and • Registration Acts.
Agro-tourism, Business planning and entrepreneurship	Grade 12	*Agro-tourism*: definition and description • types; • advantages and disadvantages; and • requirements. • The farmer's role: • Business planning: - description and explanation of a business plan - a simple business plan; and - methods of setting prices. • Entrepreneurship: - definition; - qualities of an entrepreneur; • Managing skills: - different types of business; - business creation in agriculture; - business survival strategies; and - the occupation of niche markets.

Topic	Content	
Farm valuation and planning	Grade 12	Farm valuation: • inter-reliance of different enterprises; • profitability of enterprises; • viability of enterprises; and • suitability of the farm in terms of the business plan. Management: • planning; • organising; • motivation; • control; • coordination; and • evaluation.

SECTION 3

ANNUAL TEACHING PLAN

3.1 Grade 10 Term 1

Week (4 hours/ week)	**Topic**	**Content**
	All content relates to a specific crop and/or specific animal enterprise.	
	• First part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 1:* The task must be handed out during the first week and completed by the end of the term.	
1	**Crop Production: Introduction**	At least four crop production enterprises should be selected: • General crop production practices and factors • Overview of economic importance of these crops • General overview and comparison of crop production in South Africa: - potential role and importance of industry - main production areas for different crops. • Requirements for successful crop production, with reference to: - land (soil, water, climate, other natural resources) - labour - capital • management.
2	**Crop Production: Introduction**	• Farming systems based on: - Outset: o subsistence farming o cash farming o commercial farming o seed producers. - Inset: o labour intensive farming o capital intensive farming. - Soil usage: o intensive farming o extensive farming. - Components: o crop farming o animal farming o mixed farming o specialized farming. - Technology and energy: o hand driven o animal driven o mechanised. Four crop production enterprises: • Classification of crops according to agronomic/horticultural characteristics of seed and plant. • Main cultivars available in each crop: - type of cultivar - selection of a cultivar.

Week (4 hours/ week)	**Topic**	**Content**
3	**Soil and Water Management in Crop Production**	Four crop production enterprises: • General climatic requirements (temperature, rainfall, humidity, evaporation and radiation) for crop production. • Collection of weather data: - temperature - rainfall - evaporation - wind speed - humidity.
	Start of PAT applications	
4	**Soil and Water Management in Crop Production**	• Basic soil requirements for crop production: - soil depth - soil structure - soil texture - water capacity - soil aeration - organic material.
5	**Soil and Water Management in Crop Production**	Four crop production enterprises • Soil cultivation methods: - aim of soil cultivation - methods of cultivation; - minimum and no tillage. • Types of implements based on cultivation method • Irrigation (methods and types): - reason/aim of irrigation - flood/channel irrigation - sprinkler/pivot irrigation - micro/drip irrigation - bottle irrigation. • Drainage (methods and types): - reason/aim for drainage - open furrow - pipe drainage system. • Planning of a drainage system
6	**Soil and Water Management in Animal Production**	• Waste management: - role of animals in the equilibrium of nature - use of animal waste products • Land care and land use: - dividing fields in camps (factors affecting requirements) - rotational grazing.
7	**Soil and Water Management in Animal Production**	• Water resources: - natural resources (river, valley, standing water, pans, lakes) - artificial resources (dams, borehole).

Week (4 hours/ week)	**Topic**	**Content**
8	**Crop Management Aspects**	Four crop production enterprises • Crop establishment practices: - plant density; - depth, and - factors influencing each. • Planting methods: - seed; - seedlings/replanting; - tubers; and - tree planting. • Weeds (types, methods of distributing and methods of control): - effect of weeds on production, profits, food security.
9	**Crop Management Aspects**	• Disease (types, methods of distribution, and control): - effect of diseases on production, profits, food security. • Pests types, (methods of distribution and control): - effect of pests on production, profits, food security.
10	**Crop Management Aspects**	• Monoculture • Crop rotation, and inter-cropping: - aim - type of crops - advantages • Keeping records (financial, physical and production records): • aim/reason for recording • basic introduction to different types of recording • methods of recording (basic introduction). • Crop protection programmes; awareness of relevant legislation
	Test 1	Learners must write a formal test during the end of the term not shorter than 1 hour and 100 marks.
Formal assessment - term 1 Test - 75% Practical task - 25%		Practical task related to the work completed during the first term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 1 The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to topics covered in the specific term. Can be altered to fit in the production process of the production enterprise.

Week (4 hours/ week)	**Topic**	**Content**
	• Second part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 2:* The task must be handed out during the first week and completed by the end of the term.	
1	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • General overview of animal production practices in South Africa: - potential role and importance in industry. • Requirements for successful animal production, with reference to: - land (soil, water, climate, other natural resources) - labour - capital - management. • Factors affecting animal production: - climate - type of veld - management.
2	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Main production areas in the RSA: - main production areas for these different animal production enterprises - ecological suitability for these different types of animals. • Farming systems: - subsistence farming - commercial farming: o extensive farming o intensive farming o semi intensive farming. - stud farming.
3	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • General classification of farm animals
4	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Breeds available in each animal group
5	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Breeds available in each animal group
6	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Breeds available in each animal group
7	**Animal Production**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Breeds available in each animal group
8-10	**Mid-year Examinations**	Learners must write a formal examination during the end of the term of 150 marks and 2 hour duration.

Week (4 hours/ week)	**Topic**	**Content**
Formal assessment: term 2 Mid-year examination: 75% Practical task: 25%		Practical task related to the work completed during the second term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 1 The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to the topics covered in the specific term. Can be altered to fit in the production process of the production enterprise.

3.3 Grade 10 Term 3

Week (4 hours/ week)	**Topic**	**Content**
	• Third part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 3*: The task must be handed out during the first week and completed by the end of the term.	
1	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Handling of farm animals (more emphasis on production enterprise): - principles on handling of animals - handling during activities on a farm - transport of animals - basic handling facilities (basic facilities) • Agricultural exhibitions/EXPOs/shows
2	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Care of farm animals: - young animals - importance of colostrums - different age groups/class of animals. • Behaviour of farm animals: - behaviour of animals in production enterprise - distinguish between male and female behaviour - behaviour during different life cycles like oestrus, pregnancy, calving etc.
3	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Housing: - reasons, advantages, disadvantages - different types - controlled environment. • Facilities: - basic principles - type for different purposes - basic requirements.
4	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • After-care of animal: - dehorning: o reason o different methods. - removal of extra teats - castration, reason, different methods - crutching - clipping of beaks - cutting, filing hooves of horses.

Week (4 hours/ week)	**Topic**	**Content**
5	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Identification methods (earmarks, tattooing, ear tags, branding etc.): - legal requirements/reason - explain the different methods in general.
6	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Basic concepts of feeding: - classification - terminology - components.
7	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • Diseases identification, types and methods of control: - no specific disease
8	**Animal Management aspects**	Four types of farm animals (e.g. cattle, sheep, pigs and chickens) • *Parasites*: internal and external (identification, types and methods of control).
9	**Animal Management aspects**	• Keeping records: - explaining the different types like financial, physical, production and health records - mention the different means of record keeping.
10	**Animal Management aspects**	• Basic principles of management programmes. • Awareness of relevant legislation.
	Test 2	Learners must write a formal test during the end of the term not shorter than 1 hour, consisting of 100 marks.
Formal assessment : term 3 Formal task : 75% Practical task : 25%		Practical task related to the work completed during the second term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 3 The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to topics covered in the specific term. Can be altered to fit in the production process of the production enterprise.

3.4 Grade 10 Term 4

Week (4 hours/ week)	**Topic**	**Content**
	PAT must be completed in this term. Marks must be awarded according to the guidelines provided for the final product.	
1	**Management Principles**	• Definition of management • Reasons • Advantages or benefits • Appropriate examples in animal and crop production • *Principle*: planning • *Principle*: control • Examples in animal and crop production
2	**Management Principles**	• *Principle*: co-ordination • Examples in animal and crop production • *Principle*: motivation • Example in animal and crop production
3	**Management Principles**	• *Principle*: communication • Example in animal and crop production
4	**Natural resource management**	• Different types • Example • Climate management - Climatic factors
5	**Soil potential and management**	• Soil improvement: - structure - organic content. • Conservation practices in farming: - rotational cropping - erosion prevention.
6	**Waste management**	• Different types of waste
7	**PAT**	Finalise PAT
8-10	End-of-year examinations	Learners must write an examination of 200 marks and 3 hours time allocation.
		It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
Formal assessment - term 4 Class mark of 25%		
Examination mark of 50%		
PAT - term 4 25% of marks		Write up and submit for final assessment

3.5 Grade 11 Term 1

Week (4 hours/ week)	Topic	Content
	All content relates to a specific crop and/or specific animal enterprise.	
	• First part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 1:* The task must be handed out during the first week and completed by the end of the term.	
1	**Crop Production**	Investigate at least one specific agricultural crop with regard to the following: • main production areas in the RSA and its potential role in industry • overview of economic importance of crop production.
2	**Crop Production**	One specific agricultural crop: • classification of crops according to agronomic characteristics of seed and plant. • growth curve and critical period during growth.
	Start of PAT applications	
3	**Soil and water Management aspects**	One specific agricultural crop: • important cultivars available in each selected crop • reasons for the use of each cultivar.
4	**Soil and Water Management aspects**	Soil sampling and profile studies.
5	**Soil and Water Management aspects**	Soil characteristics and properties.
6	**Soil and Water Management aspects**	One specific agricultural crop: • soil cultivation and tillage practices (methods and aims).
7	**Soil and water Management aspects**	One specific agricultural crop: • irrigation (methods and types) • water scheduling where applicable.
8	**Soil and water management aspects**	One specific agricultural crop: • climatic requirements: - precipitation; - temperature; - evaporation; - radiation; and - humidity. • Use of weather information
9	**Fertiliser management and application**	One specific agricultural crop: • soil and plant analysis • fertilising according to soil analysis.
10	**Fertiliser management and application**	One specific agricultural crop: • fertilising methods and programme.
	Test 1	Learners must write a formal test during the end of the term not shorter than 1 hour, consisting of 100 marks.

Week (4 hours/ week)	**Topic**	**Content**
Formal assessment : term 1 Test : 75% Practical task : 25%		Practical task related to the work complete during the first term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 1 The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to topics covered in the specific term. PAT can be altered to fit in the production process of the production enterprise

3.6 Grade 11 Term 2

Week (4 hours/ week)	**Topic**	**Content**
	All to a specific crop and/or specific animal enterprise.	
	• Second part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 2*: The task must be handed out during the first week and completed by the end of the term.	
1	**Crop Management aspects**	One specific agricultural crop: • Crop establishment practices • Basic principles and terminology (e.g. plant density, depth, planting time, treatment of seed, methods and factors influencing each).
2	**Crop Management aspects**	One specific agricultural crop: • *Weeds*: types, identification, prevention and methods of control. • *Diseases*: types, identification, prevention and methods of control.
3	**Crop management aspects**	One specific agricultural crop: • *Pests*: types, identification, prevention and methods of control.
4	**Crop management aspects**	One specific agricultural crop: • principles of crop rotation, monoculture and inter-cropping; and • methods of crop protection.
5	**Crop management aspects**	One specific agricultural crop: • calibration and setting of different farm implements; and • precision farming.
6	**Crop management aspects**	One specific agricultural crop: • manipulation of plant growth (pruning, trellising, green housing, etc.) • keeping records (financial, physical and production records).
7	**Crop management aspects**	One specific agricultural crop: • crop protection programme • Production-related legislation, farmer health issues and risk management.
8 -10	**Mid-year examinations**	Learners must write a formal examination at the end of the term of 150 marks consisting of 2 hours
Formal assessment : term 2: Midyear examination :75% Practical task :25%		Practical task related to the work completed during the second term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 2 The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to topics covered in the specific term. PAT can be altered to fit in the production process of the production enterprise.

3.7 Grade 11 Term 3

Week (4 hours/ week)	Topic	Content
	All relates to a specific crop and/or specific animal enterprise.	
	• Third part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 3:* The task must be handed out during the first week and completed by the end of the term.	
1	**Animal production**	One specific farm animal: • economic importance • potential role in industry • main areas of production.
2	**Animal Production**	One specific farm animal: • breed standards (evaluating and judging a breed), including selection of breeding stock (progeny testing, general appearance and selection procedures).
3	**Animal Production**	One specific farm animal: • breeding systems (e.g. cross breeding and inbreeding); and • breeding aids (e.g. stud book registers and production records).
4	**Animal management aspects**	*Reproduction*: aspects of the production unit (oestrus cycle, mating, artificial insemination, embryo transplant, cloning, gestation period and service register).
5	**Animal management aspects**	One specific farm animal: • *housing and facilities*: types and functions • *after-care*: dehorning, castration, identification, etc.
6	**Animal management aspects**	One specific farm animal: • *diseases*: types, identification of symptoms, prevention and methods of control.
7	**Animal management aspects**	One specific farm animal: • animal handling and facilities.
8	**Animal management aspects**	• *Basic veterinary practices*: diagnostic procedure, blood smear, blood sample and tissue sample. • *Immunology*: active and non-active.
9	**Animal management aspects**	• *Parasitology*: internal and external types, identification, prevention and methods of control.
10	**Animal management aspects**	One specific farm animal: • feeding aspects according to physiology status • requirements, rations, procedures and methods.
	Test 2	Learners must write a formal test during the end of the term not shorter than 1 hour consisting of 100 marks.
Formal assessment : term 3 Formal task :75% Practical task : 25%		Practical task related to the work completed during the second term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 3 The PAT marks must be used at the end of the year for the compilation of the final mark		PAT application related to topics covered in the specific term. Can be altered to fit in the production process of the production enterprise.

3.8 Grade 11 Term 4

Week (4 hours/ week)	**Topic**	**Content**
	All content relates to a specific crop and/or specific animal enterprise.	
	PAT must be completed in this term. Marks must be awarded according to the guidelines provided for the final product.	
1	**Animal management aspects**	Keeping records (physical, production, financial and animal health programmes).
2	**Animal management aspects**	• production-related legislation • farmer health issue • risk management.
3	**Range and management**	• objectives of veld management.; and • *grazing systems*: extensive and intensive principles (selective grazing, non-selective grazing, rotational grazing, etc.).
4	**Range and management**	Use (fodder flow planning)
5	**Range and management**	Carrying capacity and relevant terminology
6	**Range and management**	Veld composition and determining carrying capacity
7	**PAT**	Finalise PAT
8 -10	End-of-year examinations	Learners must write an exam of 200 marks and 3 hours time allocation. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
Formal assessment : term 4 Class mark of 25%		
Examination mark of 50%		
PAT - term 4 25% of marks		Write up and submit for final assessment.

3.9 Grade 12 Term 1

Week (4 hours/ week)	**Topic**	**Content**
	• First part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 1*: The task must be handed out during the first week and completed by the end of the term.	
1	**Farm Planning**	Soil • *depth*: crop specific; discuss the role of soil depth on crop production, drainage and moisture conservation • *texture*: definition; characteristics of different texture types • *pH*: definition; pH scale; correction of pH • *temperature*: suitable soil temperature and its influence on plant growth. Camps • reasons for camps • principles of laying out camps • *advantages*: discuss the advantages of camps. Contours • topography: - criteria for making contours - reasons - methods - advantages.
2	**Farm planning**	Resource use (regarding enterprise) • *soil*: functions of soil; the production ability of soil and influences on soil; soil data (collection, interpretation and application) • *rainfall*: effects (influenced by wind, temperature and rate) • *pastures*: different types - planted pastures; carrying capacity • *climate*: influence of light, wind, temperature and rain on climate • *labour*: labour as a resource; labour laws; influence of diseases on production and farm management • *information*: collection, use and relevance of information • *capital*: definition; different types of capital • *pesticides and herbicides:* correct use of; pollution.
		Start of PAT applications

Week (4 hours/ week)	**Topic**	**Content**
3	**Farm planning**	Precision farming: • definition; • practical application • resources available; agronomic, technical and economic applications • advantages and . • Mechanisation: • examples in specific production enterprises, e.g. planters and herbicide sprayers • *calibration calculations:* description of general principles • advantages and disadvantages of equipment • *rules and regulations for safe use:* Occupational Health and Safety Act; general safety principles.
4	**Farm planning (economic)**	Economic planning • Budgets: - definition - aim - types - basic elements of budget - steps in setting up a budget - examples of budgets - distinguish between whole-farm and enterprise budgets. Trial balance: • definition • *setting a trial balance:* use a basic example • *practical example of a trial balance* use in management.
5	**Farm planning (economic)**	Cash flow: • definition • *setting a cash flow budget*: use a basic example. Income and expenses statement: • definition • drawing up statements: - use a basic example - profit or loss calculations of a specific enterprise.
6	**Farm planning (labour)**	Labour planning: • types of labour; • *labour legislation*: influence of labour legislation on labour • *functions of labour in a specific enterprise*: drawing up a job description • *staff management:* steps in the management process; • labour problems • *Improvement of production:* methods of improvement.

Week (4 hours/ week)	**Topic**	**Content**
7	**Farm planning** **implements)**	Planning regarding implements: • types and uses of implements; • characteristics of ideal implements for a specific task • decision-making steps to acquire certain implements.
8	**Recording**	• Aim • Advantages • *Types of records*: reasons to keep certain records: - climatological (how it influences decision making) - financial (profit or loss) - labour (contracts, working hours, leave, etc.) - physical inventory - mechanical maintenance and logbook - marketing prices and movement in the market - complete records.
9	**Methods of recording**	• The role and aim of the following methods: - diary; - database (computer) - palm computer. • Factors that influence type of record system. • Practical factors that influence the system. • Records such as dairy and harvest records.
10	**Recording data**	• *Invoice*: examples of basic knowledge. • *Cheques*: examples of basic knowledge. • *Depreciation*: basic concept and calculations. • *Deposit books*: concept and application. • *Petty cash*: concept and application.
	Test 1	Learners must write a formal test during the end of the term not shorter than 1 hour consisting of 100 marks
Formal assessment: term 1 Test: 75% Practical task: 25%		Practical task related to the work completed during the first term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT - term 1: The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to topics covered in the specific term. PAT can be altered to fit in the production process of the production enterprise

3.10 Grade 12 Term 2

Week (4 hours/ week)	Topic	Content
	• Second part of PAT application handed out to learners. Learners have three weeks to complete the research portfolio. • *Practical task 2*: The task must be handed out during the first week and completed in the third term.	
1	**Product harvesting and quality control**	• *Regulations and legal aspects (Acts) regarding products*: grading requirements for the delivery of certain products. • *Handling products:* basic principles; collection and transport. • *Storing products:* methods of storing; advantages of storing. • Sorting and grading products.
2	**Marketing**	• *Marketing methods and channels*: free marketing/co-operative marketing/ marketing agents. • *Marketing Acts*: Marketing of Agricultural Products Act. • *Importance of marketing:* discuss the selling of products. • *Marketing functions*: planning / transport / processing / standardisation and grading / storing. • *Advertising*: aim of advertising in marketing; advertising methods.
3	**Role of producer organisations**	• *Type of organisation*: - name - co-operation - multinational organisation, e.g. Cape Mohair & Wool and Sambic. • Advantages and disadvantages of organisations. • *The role of the product organisation in the marketing of products:* - marketing - advertising - quality control - standardisation.
4	**Value adding**	• Value-adding methods. • *Types of products:* types and methods of packaging. • *Advantages*: higher income, job creation and longer shelf life.
5	**Processing**	• *Principles of processing*: - heating - destruction of micro-organisms - freezing. • *Advantages*: longer shelf life, food security and better quality products. • *Factors indicating the viability of value adding*: equipment, facilities and demand.
6	**Packing and Distribution**	• *Regulations and Acts*: Labelling law, Marketing Act. • *Types of packing methods and materials*: packing facilities; packaging store; wrapper. • Distribution channels. • *Transport requirements*: rules and regulations regarding transporting animals.
7	**Marketing and control**	• *Labelling and value-adding Acts:* interpretation and application of the law. • *Registration Acts*: interpretation and application of the law.

Week (4 hours/ week)	**Topic**	**Content**
8 -10	**Mid-year examinations**	Learners must write a formal examination during the end of the term of 200 marks and 3 hours time limit.
Formal assessment : term 2 Mid-year examination : 100%		Practical task related to the work completed during the second term. It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT : term 2 The PAT marks must be used at the end of the year for the final PAT mark		PAT application related to topics covered in the specific term. PAT can be altered to fit in the production process of the production enterprise

3.11 Grade 12 Term 3

Week (4 hours/ week)	Topic	Content
	• Finalize PAT. • *Practical task 2*: complete and to be handed in before the preparatory examination.	
1	**Agritourism**	• Definition and description • Types: - product routes - guest farms • Advantages and disadvantages • Requirements: - infrastructure - marketing • The farmer's role in agritourism - entrepreneur
2	**Business planning**	• Description and explanation of a business plan • A simple business plan with reference to the following aspects: - general overview of the business - planning, including SWOT analysis - vision and mission - financial details - marketing plan.
3	**Business Planning**	• Methods of setting prices: - The marketing chain and its costs (include calculations) - farmer to consumer; value adding. - Market research - reasons for market research: where, why, what and how? - Customer and competitor information (examples to illustrate the equilibrium position in the market); direct and indirect competition. - The effect of supply and demand on price - demand and supply curve. - Breakeven point involving cost and profit.
4	**Entrepreneurship**	• Definition • Qualities of an entrepreneur • Managing skills • Different types of business with reference to: - manufacturing - primary, e.g. agriculture - secondary, e.g. manufacturing - tertiary, e.g. services.
5	**Entrepreneurship**	• Business creation in agriculture (business opportunities). • Business survival strategies with reference to: - diversification - producing a unique product - value-adding marketing, e.g. milk to cheese - specialisation. • The occupation of niche markets.

Week (4 hours/ week)	**Topic**	**Content**
6	**Farm valuation**	• Inter-reliance of different enterprises. • Profitability of enterprises - basic profit and loss calculations. • Viability of enterprises - basic calculations. • Suitability of the farm in terms of the business plan - choices regarding enterprise.
7	**Management**	• Planning: - reasons for planning - steps in the decision-making process. • *Organising*: organising an enterprise - use of labour and other resources: - organogram; - plan own enterprise/farm organogram - advantages of good planning - profit and productivity. • Motivation/leadership: - human resources (training) - motivation (incentives) - delegating (creating responsibility) - communication (address issues). • Control: - development of standards-steps in the development of standards - corrective measures-changes to standards and methods - advantages of good control-economically and productivity. • Co-ordination and evaluation: - co-ordination between steps in the process - advantages of co-ordination - co-ordination of labour, tasks and machinery.
8 -10	**Preparatory examination**	Learners must write a formal examination during the end of the term of 200 marks and 3 hours time limit.
Formal assessment : term 3 Practical task :25% Preparatory examination : 75% Finalise SBA: 25%		It is compulsory to cover the given topics in the term indicated. The sequence of the topics for the term is, however, not fixed.
PAT : term 3 The PAT marks must be used at the end of the year for the final PAT mark		PAT : term 3: Write up and submit for assessment of different components.

3.12 Grade 12 Term 4

Week (4 hours/ week)	**Topic**	**Content**
1		Revision
2		Revision
3		Revision
4		End-of-year examinations
5		End-of-year examinations
6 - 10		End-of-year examinations
Formal assessment : term 4 SBA :25% PAT : 25% End-of-year examination : 50%		

SECTION 4

4.1 Introduction

Assessment is a continuous planned process of identifying, gathering and interpreting information about the performance of learners, using various forms of measurement. It involves four steps:

- generating and collecting evidence of achievement;
- evaluating this evidence;
- recording the findings; and
- using this information to understand and thereby assist the learner's development in order to improve the process of learning and teaching.

Assessment should be both informal (Assessment for Learning) and formal (Assessment of Learning). In both cases, regular feedback of learning experience is given.

4.2 Informal or Daily assessment

Assessment for learning has the purpose of continuously collecting information on a learner's achievement that can be used to improve their learning.

Informal assessment is a daily monitoring of the learners' progress. This is done through observations, discussions, practical demonstrations, learner-teacher conferences, informal classroom interactions, etc. Informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how learning is progressing. Informal assessments are used to inform planning for teaching, but need not be recorded. It should not be seen as separate from learning activities taking place in the classroom. Learners or teachers can mark these assessment tasks.

Self-assessment and peer assessment actively involves learners in assessment. This is important as it allows learners to learn from and reflect on their own performance. The results of the informal daily assessment tasks are not formally recorded, unless the teacher wishes to do so. The results of daily assessment tasks are not taken into account for promotion and certification purposes.

4.3 Formal Assessment

All assessment tasks that make up a formal programme of assessment for the year are regarded as formal assessment to record for progression and certification purposes. The formal assessment tasks are subject to moderation for the purpose of quality assurance.

Formal assessment provides teachers with a systematic way of evaluating how well learners are progressing in a grade and in a particular subject. Examples of formal assessments include tests, examinations, practical tasks, projects, oral presentations, demonstrations, performances, etc. Formal assessment tasks form part of a yearlong formal Programme of Assessment in each grade and subject.

Because of the practical nature of the subject Agricultural Management Practices, some of the practical tasks should be observed and assessed by the teacher while the learner performs the skills.

In Grades 10 and 11, all assessment tasks are assessed internally. Of the seven tasks, six tasks (which are completed during the school year) comprise 25% of the total mark for Agricultural Management Practices. The seventh task is the end-of-year assessment component, which includes two parts: a practical assessment task (PAT) and a written theory paper. Together, these two parts make up the remaining 75%. This task is set and marked internally and moderated externally.

In Grade 12 the formal assessment comprises 25% of the total mark for certification; it is set and marked internally and moderated externally. The remaining 75% of the final mark for certification is set, marked and moderated externally.

In Grade 12 five tasks are completed during the school year and make up 25% of the total mark for Agricultural Management Practices. The end-of-year assessment component has two parts: a practical assessment task and a written theory paper. Together, these two parts make up the remaining 75% of the total mark for this subject.

The forms of assessment used should be age and developmental level appropriate. The design of these tasks should cover the content of the subject and include a variety of tasks designed to achieve the objectives of the subject.

Formal assessments must cater for a range of cognitive levels and abilities of learners as shown below.

The table below suggests how levels of complexity can be addressed in the setting of examination questions:

Categories of complexity	**Description of categories**	**Some examples**	**Weighting**
Knowledge	Merely assessing the recall of basic knowledge	Give labels, list, name, state or identify functions, recognize Concepts, processes, mechanisms, etc.	**± 30%**
Comprehension	More than recall of facts including understanding and insight into routine and familiar content/situations	Describe or explain concepts, classify, processes, mechanisms; Make direct deductions from data given; do calculations, etc.	**± 30%**
Application	Application of components and systems to new, novel or familiar and unfamiliar situations	Interpret data; explain adaptations or environmental factors influencing effectiveness; draw flow charts or mind maps to illustrate processes or mechanisms; constructing tables and graphs to organize and present data; draw diagrams to investigate concepts; communicate findings and applying formulas	**± 30%**
Analysis, Synthesis and Evaluation	Analysis, synthesis and evaluation of data against given criteria	Problem solving; formulate a hypothesis; design experiments/ investigations; analyse; predict; argue and evaluate	**±10%**
TOTAL			**100%**

4.4 Programme of Assessment

The Programme of Assessment is designed to spread formal assessment tasks in all subjects in a school throughout a term.

4.4.1 Grades 10 and 11

Formal assessment: Grades 10 and 11 (seven tasks)			
Term 1	**Term 2**	**Term 3**	**Term 4: Promotion Mark**
1. Practical task 25% 2. Control test 75%	3. Practical task 25% 4. Mid-year examination 75%	5. Practical task 25% 6. Control test 75%	**SBA** Term 1:100 Term 2:100 Term 3:100 **Total: 300÷12=25** **PAT** Management Overview: 20 Practical Activities: 50 Management Test: 25 Time Register: 5 **Total: 100÷4=25** **Examination** **Total: 200÷4=50**
100	**100**	**100**	**Final mark: 100**

4.4.2 Grade 12

Formal assessment: Grade 12 (six tasks)			
Term 1	**Term 2**	**Term 3**	**Certification Mark**
1. Practical task 25% 2. Control test 75%	3. Mid-year examination 100%	4. Practical task 25% 5. Trial examination 75%	**SBA** Term1:100 Term 2: 100 Term 3:100 **Total: 300÷12=25** **PAT** Management Overview: 20 Practical Activities: 50 Management Test: 25 Time Register: 5 **Total: 100÷4=25** **Examination External total: 200÷4=50**
100	**100**	**100**	**Total certification Mark: 100**

Certification Mark for Grade 12		
SBA (25%)		**End-of-year assessment (75%)**
Term 1: 100 Term 2: 100 Term 3: 100	Practical assessment task: 100	End-of-year examination: 200 Written examination: 200
100	**100**	**200**
• Internally set • Internally marked • Externally moderated • Written on computerised SBA mark sheet provided by the provincial assessment body	• Internally set • Internally marked • Externally moderated • Written on computerised PAT mark sheet provided by the provincial assessment body	• Externally set • Externally marked • Externally moderated • Externally captured
Total mark: 100 + 100 +200 = 400		

4.4.3 Practical Task

Each grade has a minimum of one practical task in terms 1 and 3

Grade 10	Grade 11	Grade 12
Tasks should be designed from the following: • crop production • crop management • soil and water management • animal production • management.	Tasks should be designed from the following: • crop management; • soil and water management; • animal production; • animal management • fertiliser management and application.	Tasks should be designed from the following: • farm planning • recording • product harvesting • marketing • value adding • processing • packing and distribution.

Practical tasks should include both the planning and application of agricultural management skills. These tasks should be based on practical activities (such as research, investigations and projects) and should focus on the particular crop and animal production enterprises that are practised at a school (e.g. viticulture, livestock production and the manufacturing of dairy products).

4.4.4 Control Tests

- A test in the programme of assessment should not be made up of several smaller tests. Each test should cover a substantial amount of content and should be set for 45 to 60 minutes each and count a minimum of 50 marks.
- A test should include leadership and management principles and practices, concepts, processes, technology, systems, production principles, equipment and safety procedures that are relevant to various production enterprises.
- Each task, test and examination should cater for a range of cognitive levels and abilities of learners.

4.4.5 Examinations

General requirements of examination papers

Examination papers should consist of:

1. Shorter questions

This is normally section A or question one of the examination. Short questions should be set to have one or two marks per question.

The different types of short questions are:

- multiple-choice questions
- matching type (column A and column B) questions
- one word/term questions
- true or false questions / change statement to make it true.

2. Longer questions

This is normally section B, from question two onwards, and should consist of various types of questions on different sections of the content that are linked to the production enterprises in each agri-ecological region that assesses different skills. Each question should be subdivided and can include different types of questions. The following are examples:

- questions with short answers (even one word);
- questions with longer answers (one sentence to one or more paragraphs); and
- drawings of graphs, tables, diagrams, etc.

Grade 10 and Grade 11 examinations

The mid-year and end-of-year examinations for Grades 10 and 11 should consist of one paper and count 200 marks. The suggested duration of the paper is 3 hours for Grades 10 and 11. All the questions are compulsory.

	Grade	Mid-year examination	End-of-year examination
Duration	10	2 hours	3 hours
	11	2 hours	3 hours
Marks	10	150	200
	11	150	200

Grade 10 Examinations

Duration of Paper: 3 hours			
Production Enterprise	**Shorter Questions**	**Longer Questions**	**Total Marks**
Section A	50		50
Section B		150	150
Total Marks	**50**	**150**	**200**

Grade 11 Examinations

Duration of Paper 3 hours			
Production enterprise	**Shorter questions**	**Longer questions**	**Total marks**
Section A	50		50
Section B (3 questions)		3 × 50 marks	150
Total Marks	**50**	**150**	**200**

Grade 12 examinations

- The Grade 12 examination paper focuses on generic enterprises that are covered by all schools irrespective of their agro-ecological area.
- The mid-year examination for Grade 12 should consist of one paper and count 200 marks. The suggested duration of the end of the year examination paper is three hours.
- The trial examination should almost resemble the end-of-year examination in terms of the layout of the paper, the content that is covered and the questioning style. This paper should also be written in three hours and count 200 marks.
- The end-of-year examination is a written paper, which is set and moderated externally. It accounts for 50% of the marks for assessment. The external examination for Grade 12 should consist of one paper, which has a total of 200 marks. The duration of the paper should be three hours.

Duration of the Paper 3 hours			
Production Enterprise	**Shorter questions**	**Longer questions**	**Total Marks**
Section A	50 marks		50
Section B (3 questions)		3 × 50 marks	150
Total Marks	**50**	**150**	**200**

4.4.6 Practical Assessment Task of Agricultural Management Practices

1. The aim of the Practical Assessment Task for Agricultural Management Practices is to assess the management, entrepreneurial, research, marketing, operational and technical skills of learners in the production enterprises to which they are exposed. The context in which the subject is offered includes the wide range of different production systems, production enterprises, management approaches and ecological differences between the different regions of the country.

2. The PAT has to allow for this wide range of possible approaches and applications. PAT guidelines should therefore be provided to help in standardising the wide variety of possibilities - which is possible in the subject Agricultural Management Practices.

3. The PAT will show progression in complexity, content and context from Grade 10 to Grade 12.

4. The PAT (Grades 10 -12) consists of the following components**:**

    - Management overview (production planning) of the relevant enterprise;
    - Management test (case studies/scenarios);
    - all relevant practical tasks, which are comprehensively assessed;
    - records of time spent in a practical situation or production enterprise.

4.4.7 Final mark

The final mark of the PAT is linked to the following domains:

Domain	Mark
Management aspects (affective domain)	50
Practical activities (psychomotor domain and cognitive domain)	50
Total Marks	**100**

The assessment tool for this activity can be a checklist or a rubric.

4.5 Recording and Reporting

Recording is a process in which the teacher documents the level of a learner's performance in a specific assessment task. It indicates learner progress towards the achievement of the knowledge as prescribed in the Curriculum and Assessment Policy Statements. Records of learner performance should provide evidence of the learner's conceptual progression within a grade and his or her readiness to progress or being promoted to the next grade. Records of learner performance should also be used to verify the progress made by teachers and learners in the teaching and learning process.

Reporting is a process of communicating learner performance to learners, parents, schools, and other stakeholders. Learner performance can be reported in a number of ways. These include report cards, parents' meetings, school visitation days, parent-teacher conferences, phone calls, letters, class or school newsletters, etc. Teachers in all grades report in percentages against the subject. Seven levels of competence have been described for each subject listed for Grades R-12. The various achievement levels and their corresponding percentage bands are as shown in the table below.

Codes and Percentages for Recording and Reporting

Rating Code	Description of Competence	Percentage
7	Outstanding achievement	80 - 100
6	Meritorious achievement	70 - 79
5	Substantial achievement	60 - 69
4	Adequate achievement	50 - 59
3	Moderate achievement	40 - 49
2	Elementary achievement	30 - 39
1	Not achieved	0 - 29

Teachers will record actual marks against the task by using a record sheet, and report percentages against the subject on the learners' report cards.

4.6 Moderation of Assessment

Moderation refers to the process that ensures that the assessment tasks are fair, valid and reliable. Moderation should be implemented at school, district, provincial and national levels. Comprehensive and appropriate moderation practices must be in place for the quality assurance of all subject assessments.

4.7 General

This document should be read in conjunction with:

4.7.1 *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*; and

4.7.2 The policy document, *National Protocol for Assessment Grades R-12.*